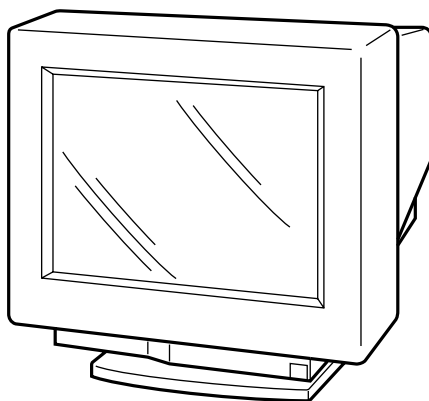


GDM-400PS/400PST/400PST9

SERVICE MANUAL

REVISED



GDM-400PS
US Model
Canadian Model
Australian Model
Equator Model

GDM-400PST
AEP Model
UK Model

GDM-400PST9
AEP Model
Chassis No. SCC-L17A-A

N3 CHASSIS

SPECIFICATIONS

Picture tube	0.25 – 0.27 mm aperture grille pitch 19 inches measured diagonally 90-degree deflection
Viewable image size	Approx. 365 × 273 mm (w/h) (14 ³ / ₈ × 10 ³ / ₄ inches) 18.0" viewing image
Resolution	Horizontal: Max. 1600 dots Vertical: Max. 1200 lines
Standard image area	Approx. 330 × 264 mm (w/h) (13 × 10 ¹ / ₂ inches) or Approx. 352 × 264 mm (w/h) (13 ⁷ / ₈ × 10 ¹ / ₂ inches)
Deflection frequency	Horizontal: 30 to 94 kHz Vertical: 48 to 160 Hz
AC input voltage/current	100 to 240 V, 50 – 60 Hz, 1.8 – 1.0 A
Power consumption	Max. 130 W
Dimensions	444 × 467 × 453 mm (w/h/d) (17 ¹ / ₂ × 18 ¹ / ₂ × 17 ⁷ / ₈ inches)
Mass	Approx. 25 kg (55 lb 2 oz)
Supplied accessories	See page 6

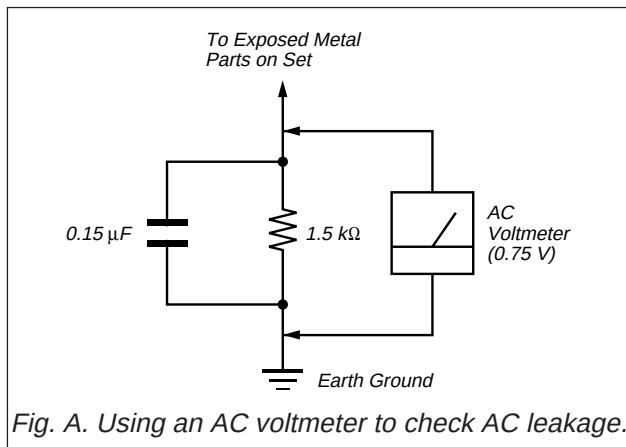
TRINITRON® COLOR GRAPHIC DISPLAY



SONY®

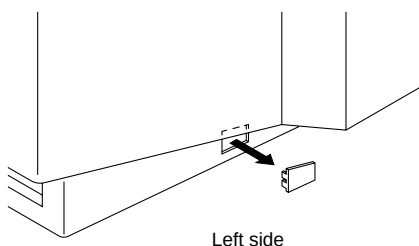
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC Leakage. Check leakage as described below.



CAUTION ON DAS (ECS) CONNECTOR

- The connector for DAS (ECS) adjustment is provided inside the cover shown below. Be careful with an electrical shock when connecting the connector with the power supplied. Also, return the removed cover to the home position.



LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes).

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOMs that are suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

WARNING!!

NEVER TURN ON THE POWER IN A CONDITION IN WHICH THE DEGAUSS COIL HAS BEEN REMOVED.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK $\triangle$ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL FOR SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL FOR SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

AVERTISSEMENT!!

NE JAMAIS METTRE SOUS TENSION QUAND LA BOBINE DE DEMAGNETISATION EST ENLEVÉE.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE $\triangle$ SONT CRITIQUES POUR LA SÉCURITÉ. NE LES REMPLACER QUE PAR UNE PIÈCE PORTANT LE NUMÉRO SPECIFIÉ. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIÉS DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

POWER SAVING FUNCTION

This monitor meets the power-saving guidelines set by VESA and Energy Star, as well as the more stringent NUTEK.

If the monitor is connected to a computer or video graphics board that is VESA DPMS (Display Power Management Signaling) compliant, the monitor will automatically reduce power consumption in three stages as shown below.

You can set the delay time before the monitor enters the power saving mode using the OSD. Set the time according to “Setting the power saving delay time” on page 16.

Note

If no video signal is input to the monitor, the “NO INPUT SIGNAL” message (page 20) appears. After the delay time has passed, the power saving function automatically puts the monitor into the active-off mode and the  indicator lights up orange. Once the horizontal and vertical sync signals are detected, the monitor automatically resumes its normal operation mode.

	Power consumption mode	Screen	Horizontal sync signal	Vertical sync signal	Power consumption	Recovery time	 indicator
1	Normal operation	active	present	present	≤ 160 W (GDM-500PS) ≤ 130 W (GDM-400PS)	—	Green
2	Standby (1st mode)	blank	absent	present	≤ 100 W (GDM-500PS) ≤ 85 W (GDM-400PS)	Approx. 3 sec.	Green and orange alternate
3	Suspend (2nd mode)	blank	present	absent	≤ 15 W	Approx. 3 sec.	Green and orange alternate
4	Active-off (3rd mode)	blank	absent	absent	≤ 5 W	Approx. 10 sec.	Orange
5	Power-off	—	—	—	0 W	—	Off

DIAGNOSIS

Failure	Power LED						
+B failure	Amber (0.5 sec)	→	Off (0.5 sec)				
Horizontal / Vertical Deflection failure, Thermal protector	Amber (1.5 sec)	→	Off (0.5 sec)				
ABL protector	Amber (0.5 sec)	→	Off (1.5 sec)				
HV failure	Amber (0.25 sec)	→	Off (0.5 sec)	→	Amber (0.25 sec)	→	Off (1.25 sec)
Aging / Self Test	Amber (0.5 sec)	→	Off (0.5 sec)	→	Green (0.5 sec)	→	Off (0.5 sec)

Aging Mode (Video Aging) : During Power Save, press “MENU” key for longer than 2 second.

Self Test (OSD Color Bar) : During Power Save, press “CONTRAST” + () key for longer than 2 second.

Reliability Check Mode : During Power Save, press “CONTRAST” – () key for longer than 2 second.

TIMING SPECIFICATION

MODE AT PRODUCTION	MODE 1	MODE 2	MODE 3
RESOLUTION	738 X 414	1280 X 960	1600 X 1200
CLOCK	28.322 MHZ	148.500 MHZ	202.500 MHZ
-- HORIZONTAL --			
H-FREQ	31.469 kHz	85.938 kHz	93.750 kHz
	usec	usec	usec
H. TOTAL	31.777	11.636	10.667
H. BLK	5.720	3.017	2.765
H. FP	0.318	0.431	0.316
H. SYNC	3.813	1.077	0.948
H. BP	1.589	1.508	1.501
H. ACTIV	26.057	8.620	7.901
-- VERTICAL --			
V. FREQ(HZ)	70.087 Hz	85.002 Hz	75.000 Hz
	lines	lines	lines
V. TOTAL	449	1011	1250
V. BLK	35	51	50
V. FP	5	1	1
V. SYNC	2	3	3
V. BP	28	47	46
V. ACTIV	414	960	1200
-- SYNC --			
INT(G)	NO	NO	NO
EXT(H/V)/POLARITY	YES N/P	YES P/P	YES P/P
EXT(CS)/POLARITY	NO	NO	NO
INT/NON INT	NON INT	NON INT	NON INT

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The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

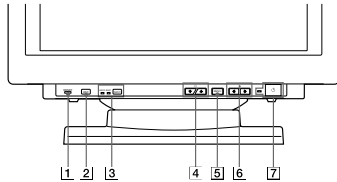
SECTION 1 GENERAL

Getting Started

Identifying Parts and Controls

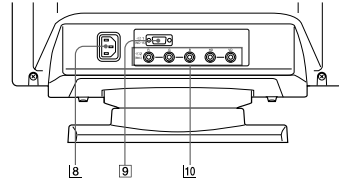
See the pages in parentheses for further details.
GDM-500PS is used for illustration purposes throughout this manual.

Front



- 1 **RESET (reset) button (page 17)**
Resets the adjustments to the factory settings.
- 2 **ASC (auto sizing and centering) button (page 7)**
Automatically adjusts the size and centering of the images.
- 3 **INPUT (input) button and HD15/BNC indicators (page 8)**
Selects the HD15 or 5BNC video input signal. Each time you press this button, the input signal and corresponding indicator alternate.
- 4 **☀ (brightness) (↕/↗) buttons (pages 8 - 17)**
Adjust the picture brightness.
Function as the (↕/↗) buttons when adjusting other items.
- 5 **MENU (menu) button (pages 8 - 17)**
Displays the MENU OSD.
- 6 **⦿ (contrast) (↔/↔) buttons (pages 8 - 17, 22)**
Adjust the contrast.
Function as the (↔/↔) buttons when adjusting other items.
- 7 **⏻ (power) switch and indicator (pages 19, 22)**
Turns the monitor on or off.
The indicator lights up in green when the monitor is turned on, and lights up in orange when the monitor is in power saving mode.

Rear



- 8 **AC IN connector**
Provides AC power to the monitor.
- 9 **Video input 1 connector (HD15)**
Inputs RGB video signals (0.700 Vp-p, positive) and SYNC signals.



Pin No.	Signal	Pin No.	Signal
1	Red	8	Blue Ground
2	Green (Composite Sync on Green)	9	DDC + 5V*
3	Blue	10	Ground
4	ID (Ground)	11	ID (Ground)
5	DDC Ground*	12	Bi-Directional Data (SDA)*
6	Red Ground	13	H. Sync
7	Green Ground	14	V. Sync
		15	Data Clock(SCL)*

* Display Data Channel (DDC) Standard of VESA

- 10 **Video input 2 connector (5 BNC)**
Inputs RGB video signals (0.700 Vp-p, positive) and SYNC signals.

EN

Getting Started

Setup

Before using this monitor, check that the following items are included in your carton:

- Monitor (1)
- Power cord (1)
- HD15 video signal cable (1)
- Macintosh adapter (1)
- Windows® 95 Monitor Information Disk / File (1)
- TCO'95 Eco-document (1) (GDM-500PS only)
- Warranty card (1)
- These operating instructions (1)

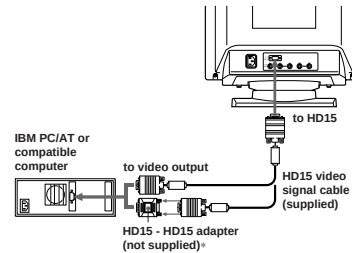
This monitor works with any IBM or compatible system equipped with VGA or greater graphics capability. Although this monitor works with other platforms running at horizontal frequencies between 30 and 94 kHz (GDM-400PS), 30 and 107 kHz (GDM-500PS), including Macintosh and Power Macintosh systems, a cable adapter is required. Please consult your dealer for advice on which adapter is suitable for your needs.

Step 1: Connect the monitor to the computer

With the computer switched off, connect the video signal cable to the monitor using the supplied HD15 video signal cable.

- If you are using an IBM PC / AT or compatible computer, refer to the section below.
- If you are using a Macintosh or compatible computer, refer to the following section, "Connecting to a Macintosh or compatible computer."
- If you want to use the 5 BNC connectors, refer to the section, "Connecting to the 5 BNC connectors."

Connecting to an IBM PC/AT or compatible computer

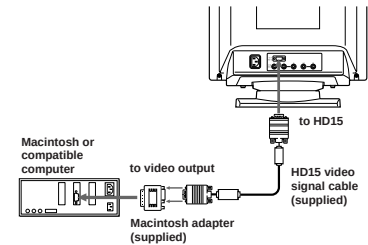


* The HD15 - HD15 adapter may be needed for some models.

If your PC system is not compatible with DDC2AB and DDC2B+

This monitor uses the No. 9 pin in the video signal connector for DDC2AB and DDC2B+ compatibility. Some PC systems which are not compatible with either DDC2AB or DDC2B+ may not accept the No. 9 pin. If you are not sure whether your PC system accepts the No. 9 pin or not, use the HD15 (Female) - HD15 (Male without the No. 9 pin) adapter (not supplied). Make sure the male side (without the No. 9 pin) is connected to the computer.

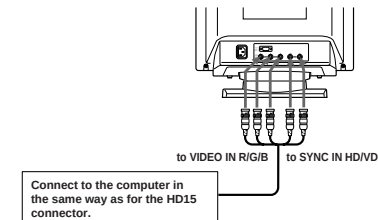
Connecting to a Macintosh or compatible computer



About the supplied Macintosh adapter

The supplied Macintosh adapter is compatible with Macintosh LC, Performa, Quadra and Power Macintosh series computers. Macintosh II series and some older versions of Power Book models may need an adapter with micro switches (not supplied).

Connecting to the 5 BNC connectors



To connect the 5 BNC connectors, use the SMF-400 video signal cable (sold separately). Connect the cables from left to right in the following order: Red-Green-Blue-HD-YD.

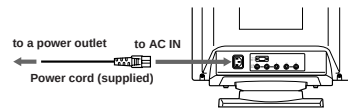
Notes

- Do not short the pins of the video signal cable.
- The DDC standard does not apply to the 5 BNC connectors. If you use the DDC standard, connect the HD15 connector to the computer with the supplied video signal cable.

Getting Started

Step 2: Connect the power cord

With the monitor switched off, connect one end of the power cord to the monitor and the other end to a power outlet.



Step 3: Turn on the monitor and computer

The installation of your monitor is complete.

Note

If "OUT OF SCAN RANGE" or "NO INPUT SIGNAL" appears on the screen, see "Warning Messages" on page 20.

For customers using Windows® 95

Install the new model information from the "Windows 95 Monitor Information Disk" into your PC. (To install the file, refer to the attached "About the Windows 95 Monitor Information Disk/File.")

This monitor complies with the "VESA DDC" Plug&Play standard. If your PC/graphics board complies with DDC, select "Plug and Play Monitor (VESA DDC)" as "Monitor type" from "Control Panel" in Windows 95. Some PCs/graphics boards do not comply with DDC. Even if your computer complies with DDC, it may have some problems connecting with this monitor. In this case, select this monitor's model name (GDM-400PS or GDM-500PS) as "Monitor type" in Windows 95.

For customers using Windows NT4.0

Monitor setup in Windows NT4.0 is different from Windows 95 and does not involve the selection of monitor type. Refer to the Windows NT4.0 instruction manual for further details on adjusting the resolution, refresh rate, and number of colors.

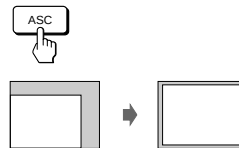
Automatically Adjusting the Size and Centering of the Picture

By pressing the auto sizing and centering (ASC) button, the size and centering of the picture are automatically adjusted to fit the screen.

1 Turn on the monitor and computer.

2 Press the ASC button.

The picture is adjusted to fit the center of the screen.



Notes

- This function is intended for use with a computer running Windows or similar graphic user interface software that provides a full-screen picture. It may not work properly if the background color is dark or if the input picture does not fill the screen to the edges (such as an MS-DOS prompt).
- The screen may go blank for a few seconds while performing the auto-sizing function. This is not a malfunction.
- Although the signals for picture aspect ratio 5:4 (resolution: 1280 × 1024) do not fill the screen to the edges, the picture is accurately displayed.

Selecting the On-screen Display Language

If you need to change the OSD language, see "Using the LANG (Language) On-screen Display" on page 17. The default setting is English.

Getting Started

Selecting the Input Signal

This monitor has two signal input connectors (HD15 and 5BNC) and can be connected to two computers. When the power of both computers is on, select the input signal you want to view as follows.

1 Turn on the monitor and both computers.

2 Press the INPUT button to select the HD15 or 5BNC input signal.

Each time you press the INPUT button, the input signal and corresponding indicator alternate.



Selecting the INPUT signal mode

This monitor has two modes of input signal selection, "AUTO" and "MANUAL."

When "AUTO" is selected

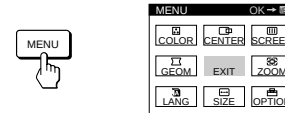
If no signal is input from the selected connector, the monitor automatically selects the other connector's signal. When you restart the computer you want to view, or that computer is in power saving mode, the monitor may automatically select the other connector's signal. This is because the monitor switches from the interrupted signal to the constant signal. If this happens, manually select the desired signal using the INPUT button.

When "MANUAL" is selected

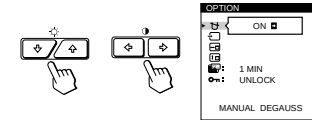
Even if no signal is input from the selected connector, the monitor does not select the other connector's signal.

1 Press the MENU button.

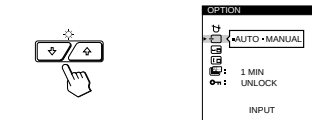
The MENU OSD appears.



2 Press the and buttons to select "OPTION," and press the MENU button again. The OPTION OSD appears.



3 Press the buttons to select "INPUT."



4 Press the buttons to select "AUTO" or "MANUAL."



The OPTION OSD automatically disappears after about 30 seconds.

To close the OSD, press the MENU button again.

For more information on using the OSD, see "Introducing the On-screen Display System" on page 9.

Customizing Your Monitor

Before adjusting

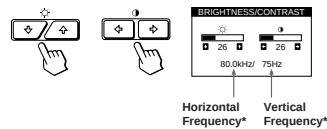
- Connect the monitor and the computer, and turn them on.
- Select "A LANG" in the MENU OSD, then select "ENGLISH" (see page 17).

Adjusting the Picture Brightness and Contrast

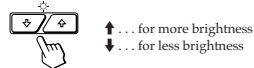
Once the setting is adjusted, it will be stored in memory for all input signals received.

- Press the (brightness) or (contrast) buttons.

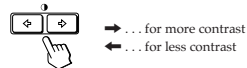
The BRIGHTNESS/CONTRAST OSD appears.



- For brightness adjustment Press the buttons.



- For contrast adjustment Press the buttons.



The OSD automatically disappears after about 3 seconds.

To reset, press the RESET button while the OSD is on. The brightness and contrast are both reset to the factory settings.

* The horizontal and vertical frequencies for the received input signal appear in the BRIGHTNESS/CONTRAST OSD.

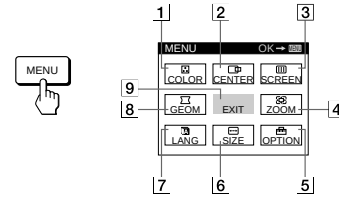
Introducing the On-screen Display System

Most adjustments are made using the MENU OSD.

MENU OSD

Press the MENU button to display the MENU OSD.

This MENU OSD contains links to the other OSDs described below.



- COLOR**
Displays the COLOR OSD for adjusting the color temperature.
- CENTER**
Displays the CENTER OSD for adjusting the centering of the picture.
- SCREEN**
Displays the SCREEN OSD for adjusting the vertical and horizontal convergence, etc.
- ZOOM**
Displays the ZOOM OSD for enlarging and reducing the picture.
- OPTION**
Displays the OPTION OSD for adjusting the OSD position and degaussing the screen, etc.
- SIZE**
Displays the SIZE OSD for adjusting the picture size.
- LANG**
Displays the LANGUAGE OSD for selecting the language.
- GEOM**
Displays the GEOMETRY OSD for adjusting the picture rotation and pincushion, etc.
- EXIT**
Closes the MENU OSD.

EN

Customizing Your Monitor

Using the CENTER On-screen Display

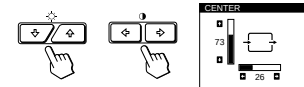
The CENTER settings allow you to adjust the centering of the picture.

Once the setting is adjusted, it will be stored in memory for the current input signal.

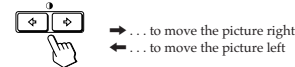
- Press the MENU button.
The MENU OSD appears.



- Press the and buttons to select "CENTER," and press the MENU button again.
The CENTER OSD appears.

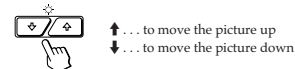


- For horizontal adjustment Press the buttons.



For vertical adjustment

Press the buttons.



The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on. The horizontal and vertical centerings are both reset to the factory settings.

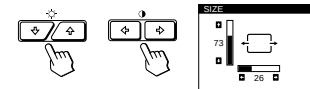
Using the SIZE On-screen Display

The SIZE settings allow you to adjust the size of the picture. Once the setting is adjusted, it will be stored in memory for the current input signal.

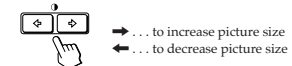
- Press the MENU button.
The MENU OSD appears.



- Press the and buttons to select "SIZE," and press the MENU button again.
The SIZE OSD appears.

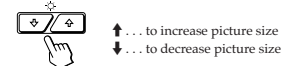


- For horizontal adjustment Press the buttons.



For vertical adjustment

Press the buttons.



The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on. The horizontal and vertical sizes are both reset to the factory settings.

Customizing Your Monitor

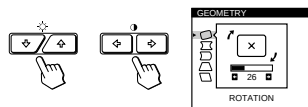
Using the GEOM (Geometry) On-screen Display

The GEOM (geometry) settings allow you to adjust the shape and orientation of the picture. Once the rotation is adjusted, it will be stored in memory for all input signals received. All other adjustments will be stored in memory for the current input signal.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **GEOM** button and the **GEOM** button to select "GEOM," and press the **MENU** button again.
The GEOMETRY OSD appears.



- 3 Press the **GEOM** buttons to select the item you want to adjust.



Select	To
ROTATION	adjust the picture rotation
PINCUSHION	adjust the picture sides
PIN BALANCE	adjust the picture side balance
KEYSTONE	adjust the picture width
KEY BALANCE	adjust the picture shape balance

- 4 Press the **GEOM** buttons to adjust the settings.



For	Press
ROTATION	→ ... to rotate the picture clockwise ← ... to rotate the picture counterclockwise
PINCUSHION	→ ... to expand the picture sides ← ... to contract the picture sides
PIN BALANCE	→ ... to move the picture sides to the right ← ... to move the picture sides to the left
KEYSTONE	→ ... to increase the picture width at the top ← ... to decrease the picture width at the top
KEY BALANCE	→ ... to move the top of the picture to the right ← ... to move the top of the picture to the left

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the **MENU** button again.

To reset, press the **RESET** button while the OSD is on.
The selected item is reset to the factory setting.

EN

Customizing Your Monitor

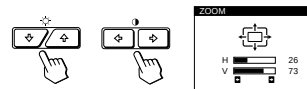
Using the ZOOM On-screen Display

The ZOOM settings allow you to enlarge or reduce the picture. Once the setting is adjusted, it will be stored in memory for the current input signal.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **GEOM** button and the **GEOM** button to select "ZOOM," and press the **MENU** button again.
The ZOOM OSD appears.



- 3 Press the **GEOM** buttons to adjust the picture zoom.



→ ... to enlarge the picture
← ... to reduce the picture

The OSD automatically disappears after about 30 seconds.
To close the OSD, press the **MENU** button again.

To reset, press the **RESET** button while the OSD is on.

Note

The picture zoom adjustment will stop as soon as either the horizontal or vertical size reaches its maximum or minimum value.

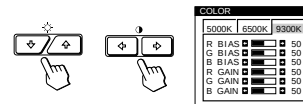
Using the COLOR On-screen Display

You can change the monitor's color temperature. For example, you can adjust or change the colors of a picture on the screen to match the actual colors of the printed picture. Once the setting is adjusted, it will be stored in memory for all input signals received.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **GEOM** button and the **GEOM** button to select "COLOR," and press the **MENU** button again.
The COLOR OSD appears.



- 3 Press the **GEOM** buttons to select the color temperature.

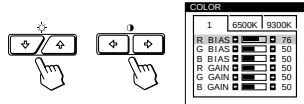


There are three color temperature modes in the OSD.
The preset adjustments are:
5000K, 6500K, 9300K

Customizing Your Monitor

4 Fine tuning the color temperature

Press the buttons to select an item and adjust by pressing the buttons.



Select **R (red)**, **G (green)**, or **B (blue) BIAS** to adjust the black level of each color's signal.

Select **R (red)**, **G (green)**, or **B (blue) GAIN** to adjust the white level of each color's signal.

The "5000K," "6500K" or "9300K" disappears and the new color settings are memorized for each of the three color modes.

The color temperature modes change as follows:
5000K → 1, 6500K → 2, 9300K → 3

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on. The selected item is reset to the factory settings.

Using the SCREEN On-screen Display

You can adjust convergence settings to eliminate red or blue shadows that may appear around objects on the screen. Adjust the CANCEL MOIRE function to eliminate wavy or elliptical patterns that may appear on the screen. Adjust the LANDING function to correct color imbalances at the four corners of the screen due to influence from the earth's magnetism.

Once CANCEL MOIRE is adjusted, it will be stored in memory for the current input signal. All other adjustments will be stored in memory for all input signals received.

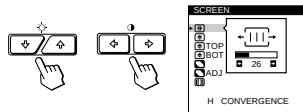
1 Press the MENU button.

The MENU OSD appears.



2 Press the and buttons to select "SCREEN," and press the MENU button again.

The SCREEN OSD appears.



3 Press the buttons to select the item you want to adjust.



Select	To
H CONVERGENCE	adjust the horizontal convergence
V CONVERGENCE	adjust the vertical convergence
TOP V CONVER TOP	adjust the screen's upper vertical convergence
BOT V CONVER BOTTOM	adjust the screen's lower vertical convergence

(continued)

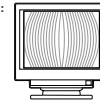
EN

Customizing Your Monitor

Select	To
LANDING	select one of the four corners that needs color correction due to influence from the earth's magnetism
ADJ LANDING ADJUST	correct the color at one of the four corners of the screen
CANCEL MOIRE *	turn the moire cancellation function "ON" or "OFF." CANCEL MOIRE must be "ON" for "ADJ (MOIRE ADJUST)" to appear on the screen.
ADJ MOIRE ADJUST	adjust the degree of moire cancellation

* Moire is a type of natural interference which produces soft or wavy lines on your screen. It may appear due to interference between the regulated pattern of the picture from the input signal and the phosphor pitch pattern of the CRT.

Example of moire:



4 Press the buttons to adjust the settings.



For	Press
H CONVERGENCE	→ ... to shift red shadows to the right and blue shadows to the left ← ... to shift red shadows to the left and blue shadows to the right
V CONVERGENCE	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up
TOP V CONVER TOP	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up

For	Press
BOT V CONVER BOTTOM	→ ... to shift red shadows up and blue shadows down ← ... to shift red shadows down and blue shadows up
LANDING	→ or ← ... to select the corner of the screen you want to adjust : top left : top right : bottom left : bottom right
ADJ LANDING ADJUST	→ or ← ... to reduce any irregularities in the color to a minimum
CANCEL MOIRE	→ ... to turn CANCEL MOIRE "ON" : ON ← ... to turn CANCEL MOIRE "OFF" : OFF
ADJ MOIRE ADJUST	→ or ← ... to adjust the screen until the moire is at a minimum

Note

The picture may become fuzzy when CANCEL MOIRE is set to "ON."

The OSD automatically disappears after about 30 seconds. To close the OSD, press the MENU button again.

To reset, press the RESET button while the OSD is on. The selected item is reset to the factory setting.

Customizing Your Monitor

Using the OPTION On-screen Display

The OPTION OSD allows you to manually degauss the screen and adjust settings such as the OSD position and power saving delay time. It also allows you to lock the controls.

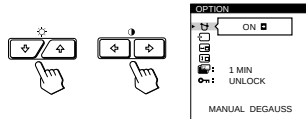
Degaussing the screen

The monitor screen is automatically degaussed (demagnetized) when the power is turned on. You can also manually degauss the monitor.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **↑/↓** and **←/→** buttons to select "**OPTION**," and press the **MENU** button again.
The OPTION OSD appears.



- 3 Press the **↑/↓** buttons to select "**MANUAL DEGAUSS**."



- 4 Press the **→** button.
The screen is degaussed for about 3 seconds.



If you need to degauss the screen a second time, wait for at least 20 minutes before repeating the steps above.

The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the **MENU** button again.

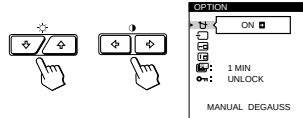
Changing the on-screen display position

You can change the OSD position (for example, when you want to adjust the picture behind the OSD).

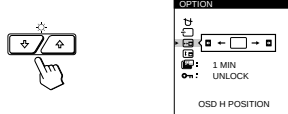
- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **↑/↓** and **←/→** buttons to select "**OPTION**," and press the **MENU** button again.
The OPTION OSD appears.



- 3 Press the **↑/↓** buttons to select "**OSD H POSITION**" or "**OSD V POSITION**." Select "**OSD H POSITION**" to adjust the horizontal position.



Select "**OSD V POSITION**" to adjust the vertical position.



- 4 Press the **←/→** buttons to move the OSD to the desired position.



The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the **MENU** button again.

To reset, press the **RESET** button while the OSD is on.

EN

Customizing Your Monitor

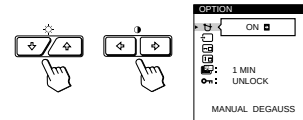
Setting the power saving delay time

You can set the delay time before the monitor enters the power saving mode. See page 19 for more information on this monitor's power saving capabilities.

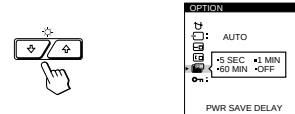
- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **↑/↓** and **←/→** buttons to select "**OPTION**," and press the **MENU** button again.
The OPTION OSD appears.



- 3 Press the **↑/↓** buttons to select "**PWR SAVE DELAY**."



- 4 Press the **←/→** buttons to select the desired time.



When **PWR SAVE DELAY** is set to "OFF," the monitor does not go into power saving mode.

The OPTION OSD automatically disappears after about 30 seconds.

To close the OSD, press the **MENU** button again.

To reset, press the **RESET** button while the OSD is on.

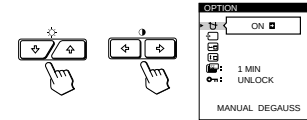
Locking the controls

The control lock function disables all of the buttons on the front panel except the **⏻** (power) switch, **MENU** and **INPUT** buttons.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **↑/↓** and **←/→** buttons to select "**OPTION**," and press the **MENU** button again.
The OPTION OSD appears.



- 3 Press the **↑/↓** buttons to select "**CONTROL LOCK**."



- 4 Press the **←/→** buttons to select "LOCK."



The OPTION OSD automatically disappears after about 30 seconds.
To close the OSD, press the **MENU** button again.

Once you select "LOCK," you cannot select any items except "EXIT" and "OPTION" in the MENU OSD. If you press any button other than the **⏻** (power) switch, **MENU** and **INPUT** buttons, the **⏻** mark appears on the screen.

To cancel the control lock

Repeat steps 1 through 3 above and press the **←/→** buttons to select "UNLOCK."

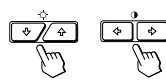
Using the LANG (Language) On-screen Display

English, French, German, Spanish, Italian and Japanese versions of the OSDs are available.

- 1 Press the **MENU** button.
The MENU OSD appears.



- 2 Press the **◀/▶** and **↑/↓** buttons to select "LANG," and press the **MENU** button again.
The LANGUAGE OSD appears.



- 3 Press the **◀/▶** buttons to select the desired language.



ENGLISH: English, FRANÇAIS: French, DEUTSCH: German, ESPAÑOL: Spanish, ITALIANO: Italian, or 日本語: Japanese.

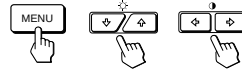
The OSD automatically disappears after about 30 seconds. To close the OSD, press the **MENU** button again.

To reset to English, press the **RESET** button while the OSD is on.

Resetting the Adjustments

Resetting an adjustment item

- 1 Press the **MENU**, **◀/▶** and **↑/↓** buttons to select the OSD containing the item you want to reset.



- 2 Press the **◀/▶** buttons to select the item you want to reset.



- 3 Press the **RESET** button.



Resetting all of the adjustment data for the current input signal

When there is no OSD displayed, press the **RESET** button.

All of the adjustments data for the current input signal is reset to the factory settings.

Note that adjustment data not affected by changes in input signal (OSD language, OSD position, input signal selection, power saving delay time and the control lock function) is not reset to the factory settings.



Resetting all of the adjustment data for all input signals

Press and hold the **RESET** button for more than two seconds.

All of the adjustment data, including the brightness and contrast, is reset to the factory settings.



Preset and User Modes

This monitor has factory preset modes for the most popular industry standards for true "plug and play" compatibility.

When a new input signal is entered, the monitor selects the appropriate factory preset mode and momentarily adjusts the phase calibration to provide a high quality picture to the center of the screen. The calibration is stored in memory and is immediately recalled whenever the same input signal is received.

No.	Resolution (dots × lines)	Horizontal Frequency	Vertical Frequency	Graphics Mode
1	640 × 350	31.5 kHz	70 Hz	MCGA
2	640 × 480	31.5 kHz	60 Hz	VGA-G
3	640 × 480	37.5 kHz	75 Hz	EVGA
4	640 × 480	43.3 kHz	85 Hz	VESA
5	720 × 400	31.5 kHz	70 Hz	VGA-Text
6	720 × 400	37.9 kHz	85 Hz	VESA
7	800 × 600	37.9 kHz	60 Hz	SVGA
8	800 × 600	46.9 kHz	75 Hz	ESVGA
9	800 × 600	53.7 kHz	85 Hz	VESA
10	832 × 624	49.7 kHz	75 Hz	Macintosh 16" Color
11	1024 × 768	48.4 kHz	60 Hz	VESA
12	1024 × 768	56.5 kHz	70 Hz	VESA
13	1024 × 768	60.0 kHz	75 Hz	EUVGA
14	1024 × 768	60.2 kHz	75 Hz	Macintosh 19" Color
15	1024 × 768	68.7 kHz	85 Hz	VESA
16	1152 × 864	67.5 kHz	75 Hz	VESA
17	1152 × 870	68.7 kHz	75 Hz	Macintosh 21" Color
18	1280 × 960	60.0 kHz	60 Hz	VESA
19	1280 × 960	85.9 kHz	85 Hz	VESA
20	1280 × 1024	64.0 kHz	60 Hz	VESA
21	1280 × 1024	80.0 kHz	75 Hz	VESA
22	1280 × 1024	91.1 kHz	85 Hz	VESA
23	1600 × 1200	75.0 kHz	60 Hz	VESA
24	1600 × 1200	81.3 kHz	65 Hz	VESA
25	1600 × 1200	87.5 kHz	70 Hz	VESA
26	1600 × 1200	93.8 kHz	75 Hz	VESA
27 *	1600 × 1200	106.3 kHz	85 Hz	VESA

* GDM-500P's only

For input signals that do not match one of the factory preset modes, the digital Multiscan technology of this monitor performs all of the adjustments necessary to ensure that a clear picture appears on the screen for any timing in the monitor's frequency range. However, it may be necessary to fine tune the vertical/horizontal size and centering. Simply press the **ASC** button or adjust the monitor according to the adjustment instructions. The adjustments are stored automatically as a user mode and recalled whenever the corresponding input signal is received. A total of 15 user adjusted modes can be stored in memory, including those made with the **ASC** button. If a 16th mode is entered, it will replace the first.

Recommended horizontal and vertical timing conditions

Horizontal sync width duty should be: >4.8% of total horizontal time.

Horizontal blanking width should be: >2.5 μsec.

Vertical blanking width should be: > 450 μsec.

Note for Windows® users

For Windows users, check your video board manual or the utility program which comes with your graphic board and select the highest available refresh rate to maximize monitor performance.

Adjusting the monitor's resolution and color number

If you are using Windows 95, adjust the monitor's resolution and color number according to the steps below. Refer also to the Windows 95 HELP files. If you are using a Macintosh or compatible computer, Refer to your computer's instruction manual.

- 1 Click the **Start** button and point to **Settings**. Then double-click the **Control Panel**.

- 2 Double-click the **Display** icon.

- 3 Click **Settings**.

- 4 Click the **Color palette**. Point to the desired color number and click. Point to the **Desktop** area and drag the slider to the desired resolution.

- 5 Click **OK**.

Note

Some settings may require that the computer be turned off then back on to take effect. In this case, follow the on-screen instructions.

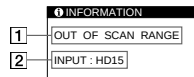
About the color number

- The Color palette setting and the actual number of colors is as follows:
High Color (16 bit) → 65,536 colors
True Color (24 bit) → about 1,677 million colors
- In True color mode (24 bit), speed may be slower.
- The color number may vary according to your computer or video board.

Additional Information

Warning Messages

If there is something wrong with the input signal, one of the following messages appears.



1 The input signal condition

“OUT OF SCAN RANGE” indicates that the input signal is not supported by the monitor’s specifications.

“NO INPUT SIGNAL” indicates that no signal is input, or the input signal from the selected input connector is not received.

2 The selected input connector

Indicates which input connector is receiving the wrong signal. If there is something wrong with the signal from both input connectors, “HD15” and “BNC” are displayed alternately.

To solve these problems, see “Troubleshooting” below.

Troubleshooting

This section may help you isolate the cause of a problem and as a result, eliminate the need to contact technical support.

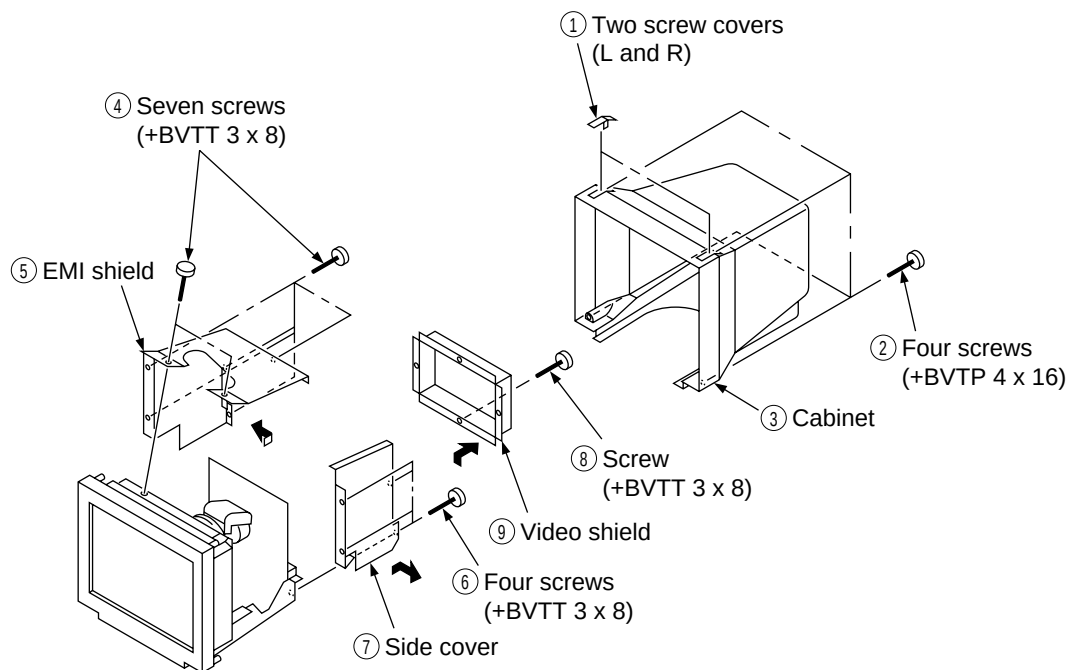
Symptom	Check these items
No picture	
If the  indicator is not lit	• Check that the power cord is properly connected. • Check that the  (power) switch is in the “on” position.
If the “NO INPUT SIGNAL” message appears on the screen, or if the  indicator is either orange or alternating between green and orange	• The screen is blank when the monitor is in power saving mode. Try pressing any key on the computer keyboard. • Check that your computer power switch is in the “on” position. • Check that the input select setting is correct. • Check that the video signal cable is properly connected and all plugs are firmly seated in their sockets. • Check that the 5 BNCs are connected in the correct order (from left to right: Red–Green–Blue–HD–VD) (page 6). • Ensure that no pins are bent or pushed in the HD15 video input connector. • Check that the video board is completely seated in the proper bus slot.
If the “OUT OF SCAN RANGE” message appears on the screen	• Check that the video frequency range is within that specified for the monitor. Horizontal: 30 – 94 kHz (GDM-400PS), 30 – 107 kHz (GDM-500PS) Vertical: 48 – 160 Hz Refer to your computer’s instruction manual to adjust the video frequency range. • If you are using a video signal cable adapter, check that it is correct.
If no message is displayed and the  indicator is green or flashing orange	• See “Self-diagnosis Function” (page 22).
If using a Macintosh system	• Check that the Macintosh adapter and the video signal cable are properly connected (page 6).
If using Windows® 95	• If you cannot find your model’s name (GDM-400PS or GDM-500PS) among the Sony monitors in the Windows 95 monitor selection screen, select the DDC standard monitor or install the Windows 95 Monitor Information Disk (page 7). The DDC standard does not apply to the 5 BNC connectors. If you use the DDC standard, connect the computer to the HD15 connector with the supplied video signal cable.
Picture is scrambled	• Check your graphics board manual for the proper monitor setting. • Check this manual and confirm that the graphics mode and the frequency you are trying to operate at is supported. Even if the frequency is within the proper range, some video boards may have a sync pulse that is too narrow for the monitor to sync correctly.

Additional Information

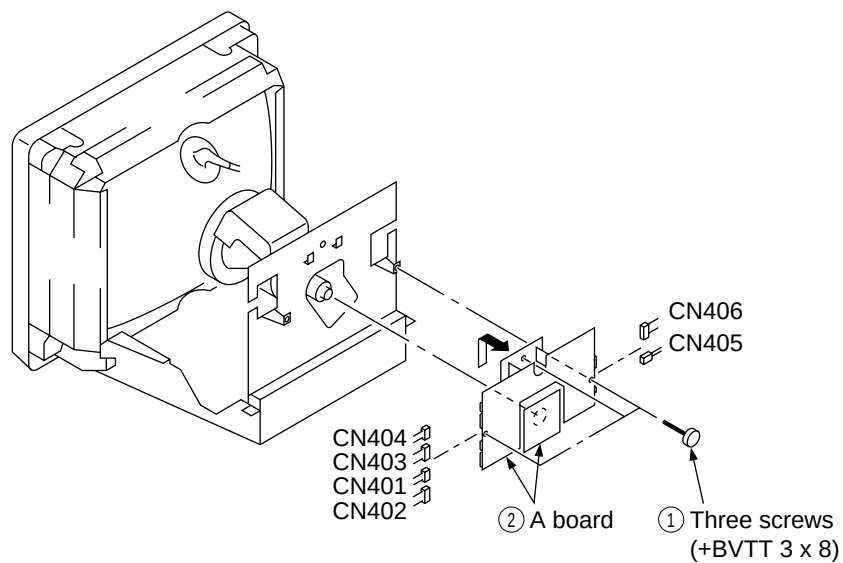
Symptom	Check these items
Color is not uniform	• Degauss the monitor (page 15). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. • Adjust the landing (pages 13 – 14).
You cannot adjust the monitor with the buttons on the front panel	• If the control lock function is set to on, set it to off using the OPTION OSD (page 16).
White does not look white	• Adjust the color temperature (pages 12 – 13). • Check that the 5 BNCs are connected in the correct order (from left to right: Red–Green–Blue–HD–VD) (page 6).
Screen image is not centered or sized properly	• Press the ASC button (page 7). • Adjust the size or centering (page 10). • Some video modes do not fill the screen to the edges. This problem tends to occur with certain video boards.
Edges of the image are curved	• Adjust the geometry (page 11).
White lines show red or blue shadows at edges	• Adjust the convergence (pages 13 – 14).
Picture is fuzzy	• Adjust the contrast and brightness (page 9). • Degauss the monitor (page 15). If you place equipment which generates a magnetic field, such as a loudspeaker, near the monitor, or you change the direction of the monitor, color may lose uniformity. The degauss function demagnetizes the metal frame of the CRT to obtain a neutral field for uniform color reproduction. If a second degauss cycle is needed, allow a minimum interval of 20 minutes for the best result. • If red or blue shadows appear along the edges of images, adjust the convergence (pages 13 – 14). • If the moire is cancelled, the picture may become fuzzy. Decrease the moire cancellation effect (pages 13 – 14).
Picture bounces or has wavy oscillations	• Isolate and eliminate any potential sources of electric or magnetic fields. Common causes for this symptom are electric fans, fluorescent lighting or laser printers. • If you have another monitor close to this monitor, increase the distance between them to reduce the interference. • Try plugging the monitor into a different AC outlet, preferably on a different circuit. • Try the monitor on a different computer in a different room.
Picture is flickering	• Set the refresh rate on the computer to obtain the best possible picture by referring to the computer’s manual.
Picture appears to be ghosting	• Eliminate the use of video cable extensions and / or video switch boxes if this symptom occurs. Excessive cable length or a weak connection can produce this symptom.
Wavy or elliptical (moire) pattern is visible	• Cancel the moire (pages 13 – 14). The moire may be modified depending on the connected computer. • Due to the relationship between resolution, monitor dot pitch and the pitch of some image patterns, certain screen backgrounds sometimes show moire. Change your desktop pattern.
Two fine horizontal lines (wires) are visible	• These wires stabilize the vertically striped aperture grille (page 19). This aperture grille allows more light to pass through to the screen giving the Trinitron CRT more color and brightness.
Hum is heard right after the power is turned on	• When the power is turned on, the auto-degauss cycle is activated. While the auto-degauss cycle is activated (3 seconds), a hum may be heard. The same hum is heard when the monitor is manually degaussed. This is not a malfunction.

SECTION 2 DISASSEMBLY

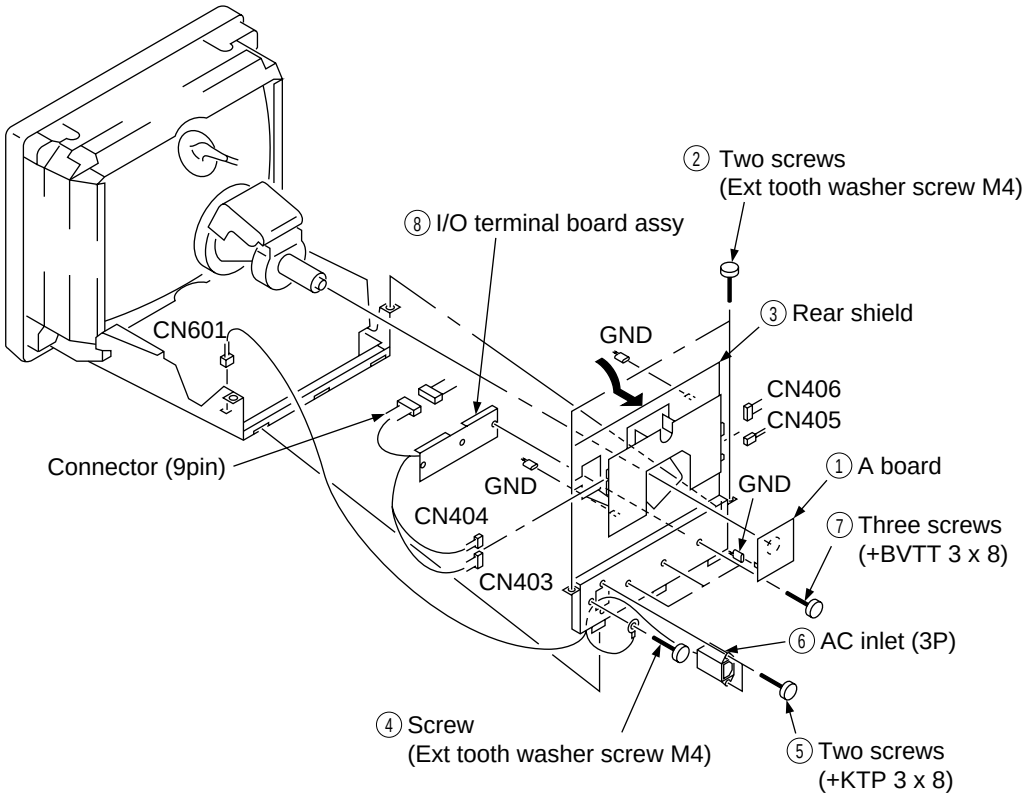
2-1. CABINET REMOVAL



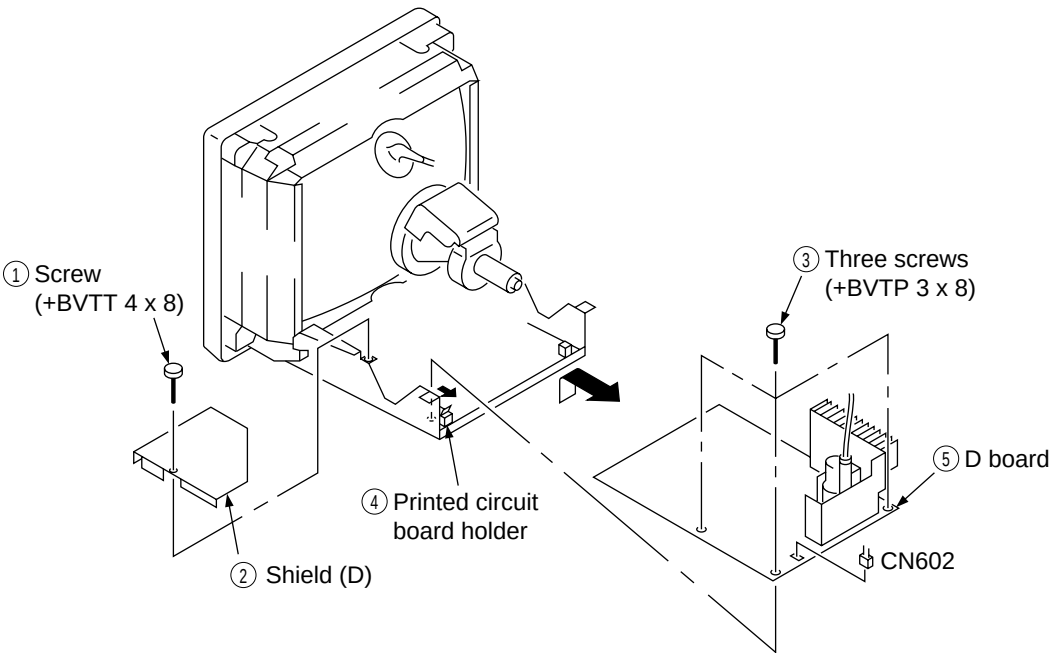
2-2. A BOARD REMOVAL



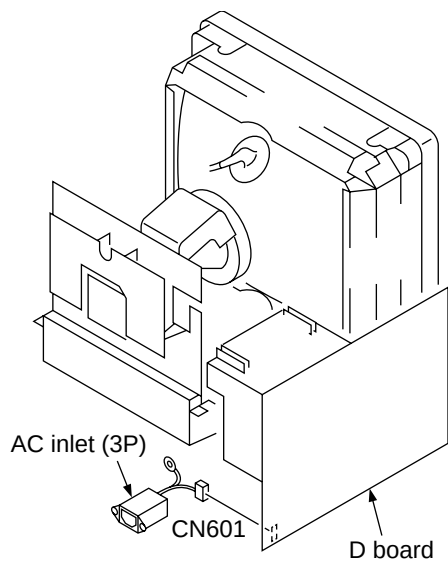
2-3. AC INLET AND I/O TERMINAL BOARD ASSY REMOVAL



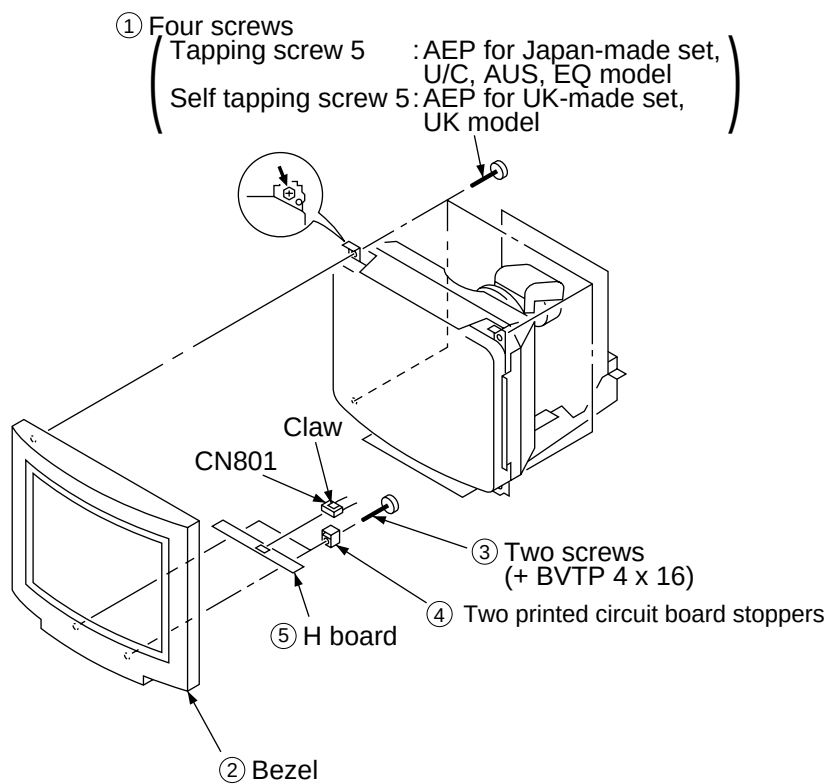
2-4. D BOARD REMOVAL



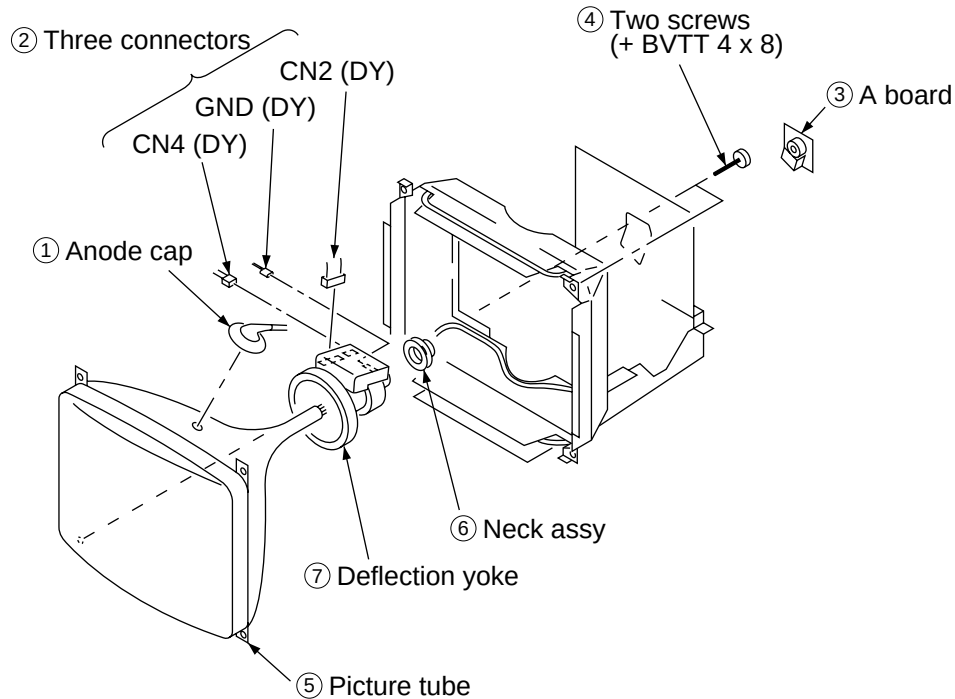
2-5. SERVICE POSITION



2-6. H BOARD REMOVAL



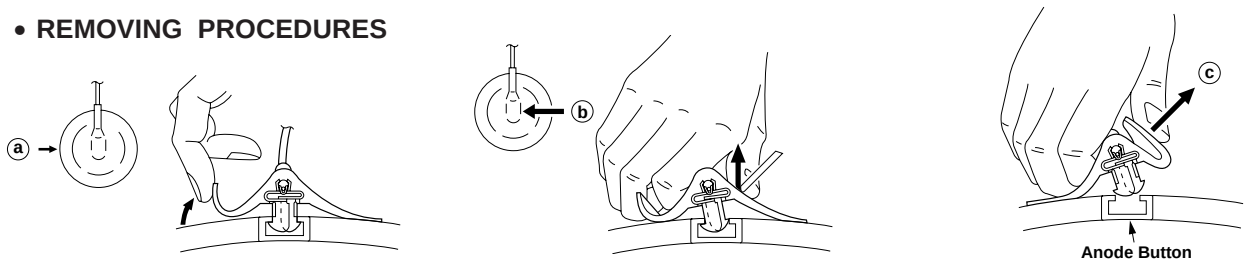
2-7. PICTURE TUBE REMOVAL



• REMOVAL OF ANODE-CAP

NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon painted on the CRT, after removing the anode.

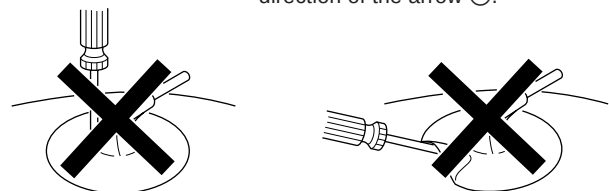
• REMOVING PROCEDURES



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ①a.
- ② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②b.
- ③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ③c.

• HOW TO HANDLE AN ANODE-CAP

- ① Don't hurt the surface of anode-caps with sharp shaped material!
- ② Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.
- ③ Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.



SAFETY RELATED ADJUSTMENT

When replacing or repairing the shown below table, the following operational checks must be performed as a safety precaution against X-rays emissions from the unit.

	Part Replaced (▣)
HV ADJ	RV901

	Part Replaced (▣)
HV Regulator Circuit	D board IC901, R903, R922, T901, RV901 • Mounted D board
HV HOLD DOWN Circuit	D board D913, D916, C923, R920, R927, R935, R936, T901 • Mounted D board
Beam Current Protector Circuit	D board IC901, D901, D902, D918, R053, R918, R923, R928, R932, R933, R934, R939, T901 • Mounted D board

* Confirm one minute later turning on the power.

• HV Protector Circuit Check

- (1) Confirm that the voltage between cathode of D913 and GND is more than 17.5 V DC.
- (2) Using external DC Power Supply, apply the voltage shown below between cathode of D913 and GND, and confirm that the HV HOLD DOWN circuite works. (TV Raster disappears)
Standard voltage: Less than 23.40 V DC

• Beam Current Protector Circuite Check

(1) Hardware logic circuit

- Turn the POWER SW on, and check that the RASTER fades in.
- Connect a variable resistor (20 k Ω or more) and an ammeter in series between FBT pin ⑪ and – 15 V line (– side of C637). Decrease gradually the resistance of the variable resistor from maximum to minimum, and confirm that the Beam Current Protector Circuite works (TV Raster disappears). The current must be within the range shown below.
Standard current: Less than 1.09 mA

(2) Software logic circuit

- Turn the POWER SW on, and check that the RASTER fades in.
- Short between + of C639 and GND.
- Connect a variable resistor (20 k Ω or more) and an ammeter in series between FBT pin ⑪ and – 15 V line (– side of C637). Decrease gradually the resistance of the variable resistor form maximum to minimum, and confirm that the Beam Current Protector Circuite works (TV Raster disappears). The current must be within the range shown below.
Standard current: Less than 1.14 mA

SECTION 4

ADJUSTMENTS

• Landing Rough Adjustment

1. Enter the full white signal. (or the full black dots signal).
 2. Adjust the contrast to the maximum.
 3. Make the screen monogreen.
- Note: Off the outputs from R ch and B ch of SG.
4. Reverse the DY, and adjust coarsely the purity magnet so that a green raster positions in the center of screen.
 5. Adjust the tilt of DY, and fix lightly with a clamp.
- Note: "TILT" shall be set at 128.

• Landing Fine Adjustment

1. Put the set inside the Helmholtz coil.
Set "LCC SW" at 0.
And check "LCC LT", "LCC LB", "LCC RT", "LCC RB" at 128.
 2. Input the single green signal and set the "CONTRAST" to MAX.
<Landing adjustment luminance>
Landing adjustment after 2 hours of aging by Landing adjustment luminance.
*Landing adjustment luminance
: same luminance on aging (Reference: SIK=250uA)
*Max luminance
: 110 ch/m SIK=750uA
 3. Demagnetize the metal part of the chassis with the hand degausser and coil degausser, and the CRT surface with the hand degausser.
Input AC 230V to AC IN, turn on and off the power to perform auto degaussing. (Perform auto degaussing by setting "MON CON REG2"=152. Return to the original value after use.)
Demagnetize the CRT surface with the hand degausser again.
(When degaussing, set the current of LCC at 0.)
- Note:
- (1) Adjust in a non-magnetic field. BV=45uT.
 - (2) If adjusting in a magnetic fields, add the shift from the non-magnetic field in your estimation.
 4. Attach the wobbling coil to the designated part of the CRT neck.
 5. Pull the TLH plate nooked on stopper.
 6. Attach the sensor of the landing adjustment unit on the CRT surface.
 7. Adjust the DY position and purity, and the DY tilt, and landing of the center and 4 corners with the landing checker.
Purity Adjustment use 2-pole magnet on DY side, Don't use on Neck Assy one.

<Specifications>

Adjust so that the green is within the specification given right.
4 corner adjust target : within ± 1

(μm)			
0 ± 4	0 ± 7.5	0 ± 4	0
0 ± 4	0 ± 5	0 ± 4	
± 4	0 ± 7.5	0 ± 4	

The red and blue must be within the specification given right with respect to the green.

(μm)		
± 5	± 5	± 5
± 5	± 5	± 5
± 5	± 5	± 5

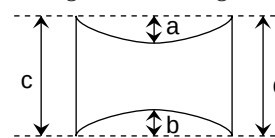
A difference between red and blue must be within the specification given right.

(μm)		
8	8	8
8	7	8
8	8	8

* Adjustment and measurement should be made at the points one inch inside the fluorescent screen.

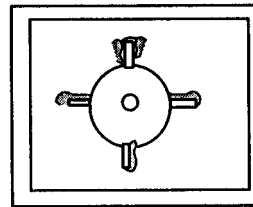
8. Tighten DY screw.
Torque: 22 ± 2 kgcm (2.2 ± 0.2 Nm)
Auto-degauss it.
9. Adjustment each top and bottom pins by switching DY neck up-down, and adjust V. TILT and horizontal trapezoid by swinging DY neck right-left. And then fix with 4 wedges. (Insert wedge certainly so that the DY will not loosen.)

Fixing DY with wedges.



"a" and "b" must be equal, and "c" and "d" must be almost equal.

<How to drive in wedges>

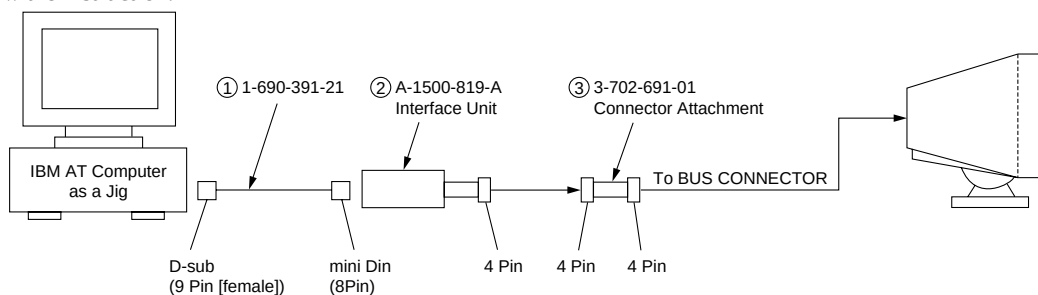


Apply a locking agent to the upper wedges only.
In such a case, apply agent so that it enters both sides of wedge and also inside the DY.

10. Check landing at each corner and in case not in specification, adjust by sticking disk magnets on CRT funnel. (After placing disk magnets, absolutely hand degauss and check the results.)
11. Remove the sensor and wobbling coil.
12. Check that the DY is not tilting. Then, fix purity magnets with white paint and fix wedge with RTV.

GDM-400PS/400PST/400PST9

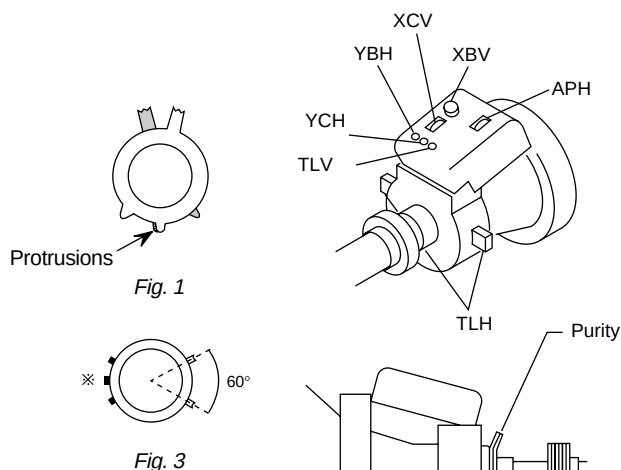
Connect the communication cable of the computer to the connector located on the D board on the monitor. Run the service software and then follow the instruction.



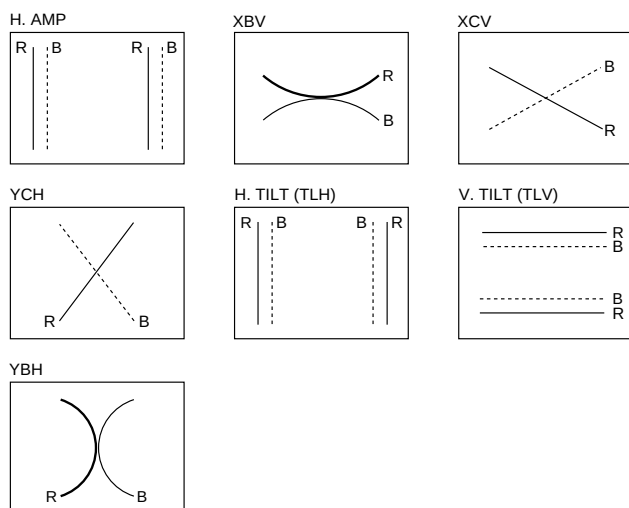
*The parts above (① ~ ③) are necessary for DAS adjustment.

• Convergence Rough Adjustment

- (1) Receive an image of the white crosshatch signals (white lines on black).
- (2) Place the protrusions of the 6-fold poles magnet attached to the CRT neck upon each other. (Fig. 1)
- (3) Make rough adjustment of the H and V direction convergence by using 4-fold poles magnet.



* Set so that the protruding parts of the 2 magnet rings agree with each other.



• Convergence Specification

MODE	Zone	N. Hemisphere	S. Hemisphere
fh± 60 kHz	A Zone	0.24 mm	0.24 mm
	B Zone	0.24 mm	0.28 mm
	C Zone	0.32 mm	0.36 mm
fh< 60 kHz	A Zone	0.24 mm	0.24 mm
	B Zone	0.32 mm	0.36 mm
	C Zone	0.36 mm	0.40 mm

• White Balance Adjustment Specification

- (1) COLOR INDEX = 3
 $x = 0.283 \pm 0.005$
 $y = 0.298 \pm 0.005$
 (All White)
- (2) COLOR INDEX = 2
 $x = 0.313 \pm 0.005$
 $y = 0.329 \pm 0.005$
 (All White)
- (3) COLOR INDEX = 1
 $x = 0.346 \pm 0.005$
 $y = 0.359 \pm 0.005$
 (All White)

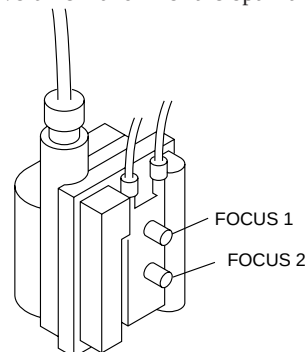
• Vertical and Horizontal Position and Size Specification

MODE	1-3
A	352 mm
B	264 mm

$a \leq 3.2 \text{ mm}$
 $b \leq 3.2 \text{ mm}$

• Focus adjustment

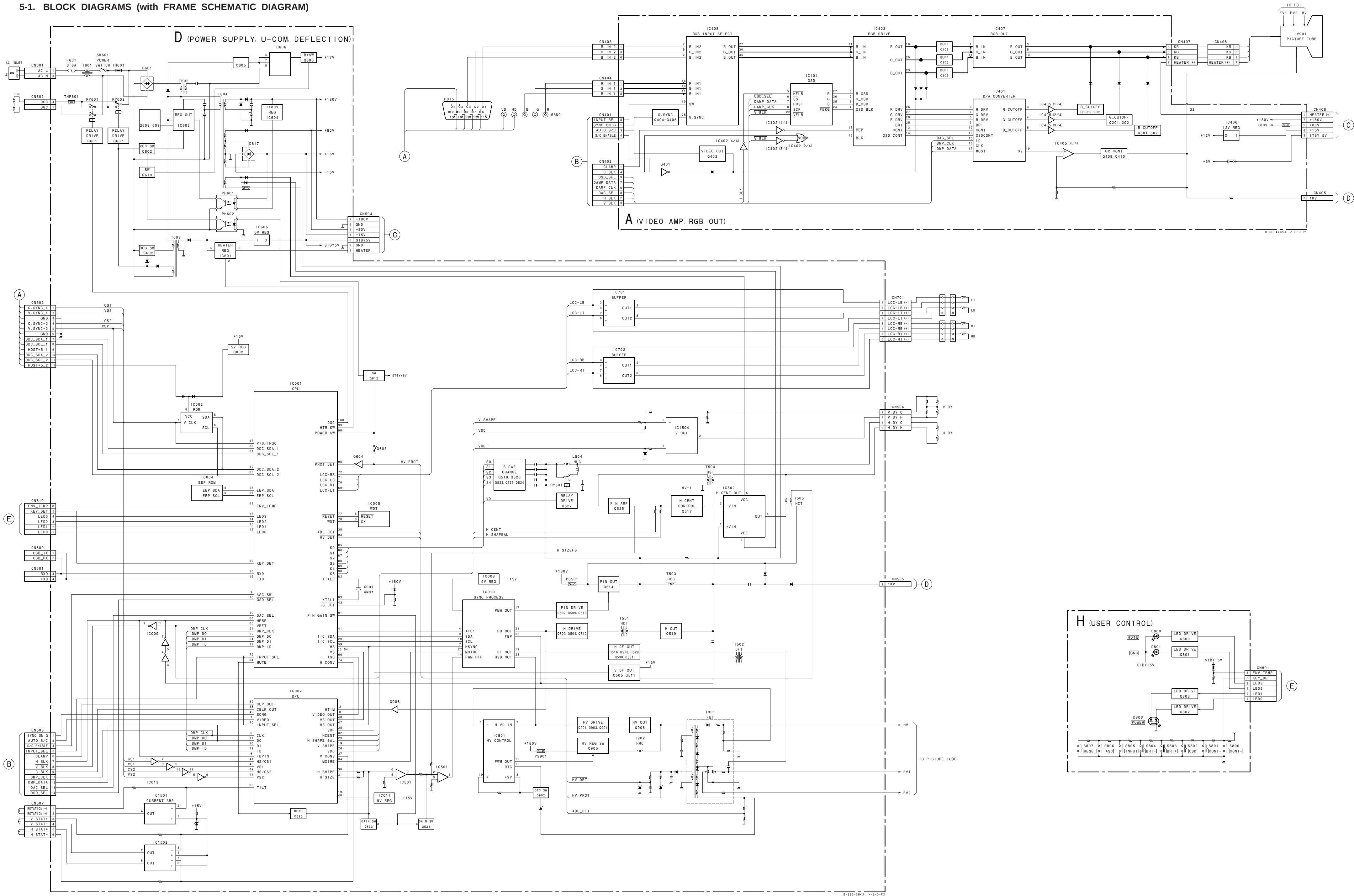
Adjust the focus volume 1 and 2 for the optimum focus.



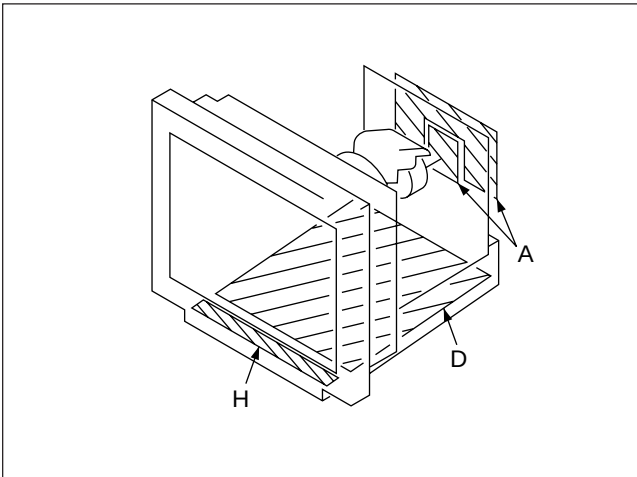
SECTION 5

DIAGRAMS

5-1. BLOCK DIAGRAMS (with FRAME SCHEMATIC DIAGRAM)



5-2. CIRCUIT BOARDS LOCATION



Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Can not be measured.
- : B + bus.
- - - - : B - bus.

5-3. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

Note:
• All capacitors are in μF unless otherwise noted. (μF : μF)
Capacitors without voltage indication are all 50 V.
• Indication of resistance, which does not have one for rating electrical power, is as follows.

Pitch: 5 mm
Rating electrical power 1/4 W (CHIP: 1/10 W)

- All resistors are in ohms.
- : nonflammable resistor.
- : fusible resistor.
- Δ : internal component.
- : panel designation, and adjustment for repair.
- : earth-ground.
- : earth-chassis.
- The components identified by $\mathbf{H}$ in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
- When replacing components identified by $\mathbf{H}$, make the necessary adjustments indicated. (See page 3-1)
- When replacing the part in below table, be sure to perform the related adjustment.

Device	Printed symbol	Terminal name	Circuit
① Transistor		Collector Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode (NC)	
④ Diode		Cathode Anode (NC)	
⑤ Diode		Common Anode Cathode	
⑥ Diode		Common Anode Cathode	
⑦ Diode		Common Anode Cathode	
⑧ Diode		Common Anode Anode	
⑨ Diode		Common Anode Anode	
⑩ Diode		Common Cathode Cathode	
⑪ Diode		Common Cathode Cathode	
⑫ Diode		Anode Cathode Cathode	
⑬ Transistor (FET)		Drain Source Gate	
⑭ Transistor (FET)		Drain Source Gate	
⑮ Transistor (FET)		Source Drain Gate	
⑯ Transistor		Emitter Collector Base	
— Discrete semiconductor			

(Chip semiconductors that are not actually used are included.)

(1) Schematic Diagram of D (1/2) Board

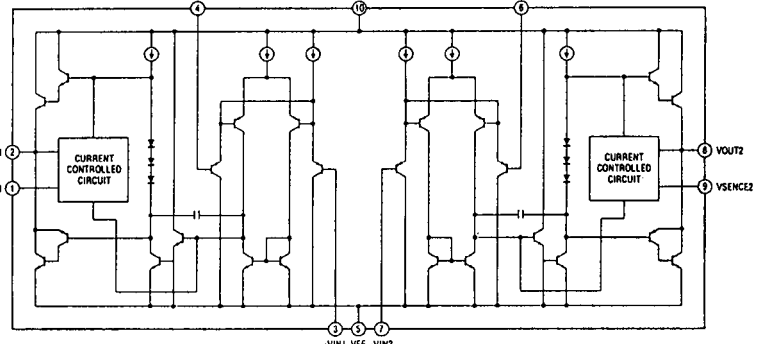
• D BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	
IC002	5	0.5	IC702	1	0.8	Q518	G	0	
	6	3.5		D	31.2				
	7	0							
IC004	5	4.9		3	1.3	Q519	B	-0.9	
	6	4.9		4	1.3		G	76.5	
	7	0		6	1.3				
IC005	1	0.4		7	1.3	Q520	G	4.8	
	3	0		8	1.6		D	0	
	7	1.5		9	1.6				
IC009	1	-0.5	IC901	1	9.0	Q521	B	4.3	
	2	0		2	5.3		E	3.8	
	3	0		4	0				
	4	4.4		6	1.1	Q522	G	4.9	
	5	4.4		7	1.1		D	0	
	6	0.5		8	9.0				
	14	4.9		12	0	Q523	G	4.8	
				15	0.2		D	0	
				16	7.8				
				19	8.9	Q524	G	4.8	
							D	0	
IC010	1	3.8	IC1501	1	2.8	Q525	B	4.8	
	3	*		2	2.8		E	5.4	
	4	2.6		4	-1.3				
	5	2.8	IC1502	1	0.1	Q526	B	0	
	6	5.0		2	0.1		C	3.1	
	7	0.3		3	3.5				
	8	4.9		4	3.5	Q527	B	4.9	
	9	4.9		5	1.8		C	0.4	
	10	4.4		7	1.8				
	12	4.4		8	0.6	Q528	B	42.4	
	14	4.3		9	0.6		E	43.0	
	15	4.3							
	16	5.0	IC1504	2	0.4	Q529	B	44.3	
	17	2.0		3	14.0		C	74.3	
	18	-0.2		4	1.3		E	43.7	
	19	5.2		5	1.3	Q530	B	43.0	
	20	8.6		7	5.3		E	43.3	
	21	1.2		7	-13.3				
	22	2.3	PH601	1	14.7	Q531	B	43.7	
	23	3.6		2	13.6		C	74.3	
	24	4		3	4		E	43.4	
	25	0		4	3.8	Q532	B	0	
	26	3.6					C	4.9	
	27	4							
IC013	1	0	PH602	1	1.0	Q533	B	5.2	
	2	5.0		2	0		C	0	
	3	4.0		3	0				
	4	0		4	2.6	Q534	B	5.1	
	8	0.3		Q001	B		0	C	0
	9	3.8			C		3.7		
	10	4.9	Q002		B	5.5	Q601	B	0
	11	0		C	14.6	C		14.7	
IC501	1	4.3	Q003	B	0	Q602	B	2.7	
	2	0		E	0.2		C	16.4	
	3	0							
	5	0	Q004	B	4.9	Q603	B	0	
	6	0		E	4.2		C	2.5	
	7	-9.8							
IC502	1	76.1	Q005	B	4.9	Q604	B	2.5	
	2	76.2		E	0.1		C	0	
	4	75.6		E	3.2		E	2.5	
IC601	2	5.2	Q006	B	2.6	Q605	G	10.8	
	3	6.6		E	3.2		D	96.0	
	4	5.2					S	0.2	
	5	8.0	Q007	B	7.2	Q606	B	1.1	
				C	0		C	0	
IC602	D	412.0	Q008	B	2.3	Q607	B	0.8	
	C	6.0		E	2.8		C	0.1	
							E	0	
IC603	1	147.5	Q503	B	2.3	Q608	B	6.2	
	3	3.9		E	2.3		C	0	
	5	4.5					E	6.2	
	6	2.2	Q504	B	2.3	Q609	B	0	
	7	3.8		C	13.5		C	0	
	9	0		E	2.3		E	6.2	
	10	0	Q505	B	3.5	Q610	B	5.7	
	11	0		E	7.0		C	0.5	
	12	0					E	0.5	
	13	0	Q506	B	0.2	Q612	B	5.0	
	14	16.3		C	8.4		E	4.3	
	15	10.6							
	16	88.5	Q507	B	0.2	Q901	B	0.1	
	17	0		C	8.4		C	8.8	
	18	78.2							
IC604	1	179.8	Q508	B	8.4	Q902	B	9.3	
	3	2.5		E	8.2		E	9.3	
	4	12.6							
IC606	1	2.7	Q510	B	8.4	Q903	B	7.6	
	2	2.6		E	14.2		E	7.6	
	3	1.4		E	8.2				
	4	0.2	Q511	B	7.5	Q904	B	7.6	
	5	2.5		C	7.0		C	9.0	
	7	10.9		E	7.0		E	9.3	
IC701	1	-0.3	Q512	B	-14.3	Q905	G	177.3	
	2	-0.5		C	-0.1		D	190.8	
	3	1.3		E	-14.3		S	69.8	
	4	1.3	Q514	G	175.8	Q906	G	7.6	
	5	1.3		D	76.8		D	60.5	
	6	1.3		S	180.1				
	7	1.3	Q516	B	5.2	Q907	B	7.6	
	8	-1.3		C	42.4				
	9	-1.3		E	4.6				
			Q517	B	4.9	Q908	B	7.6	
				C	70.9		D	7.6	
				E	4.4				

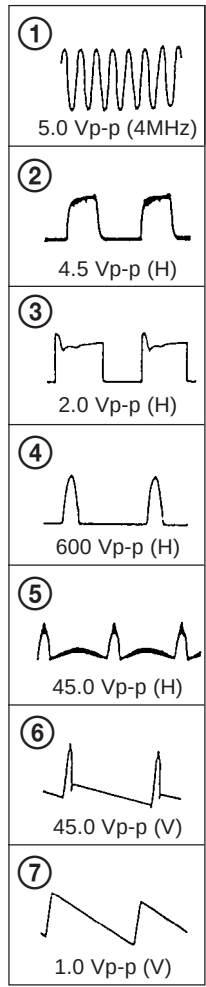
Schematic diagram

(1/2) board

• D BOARD IC701, IC702, IC1502 LA6510



• D BOARD WAVEFORMS



D(2/2) (LCC)

15V
-15V

LCC-LT

LCC-LB

LCC-RT

LCC-RB

+15V
-15V

R701 10k
R702 10k
R703 10k
R704 10k
R705 10k
R706 10k
R707 10k
R708 10k
R709 10k

C701 0.1
C702 0.1
C703 0.1
C704 0.1
C705 0.1
C706 0.1
C707 0.1
C708 0.1
C709 0.1

D701 UHZ-TE-17-4.75
D702 MA153-TX
D703 MA153-TX
D704 MA153-TX
D705 MA153-TX

IC701 LAG510 AMP
IC702 LAG510 AMP

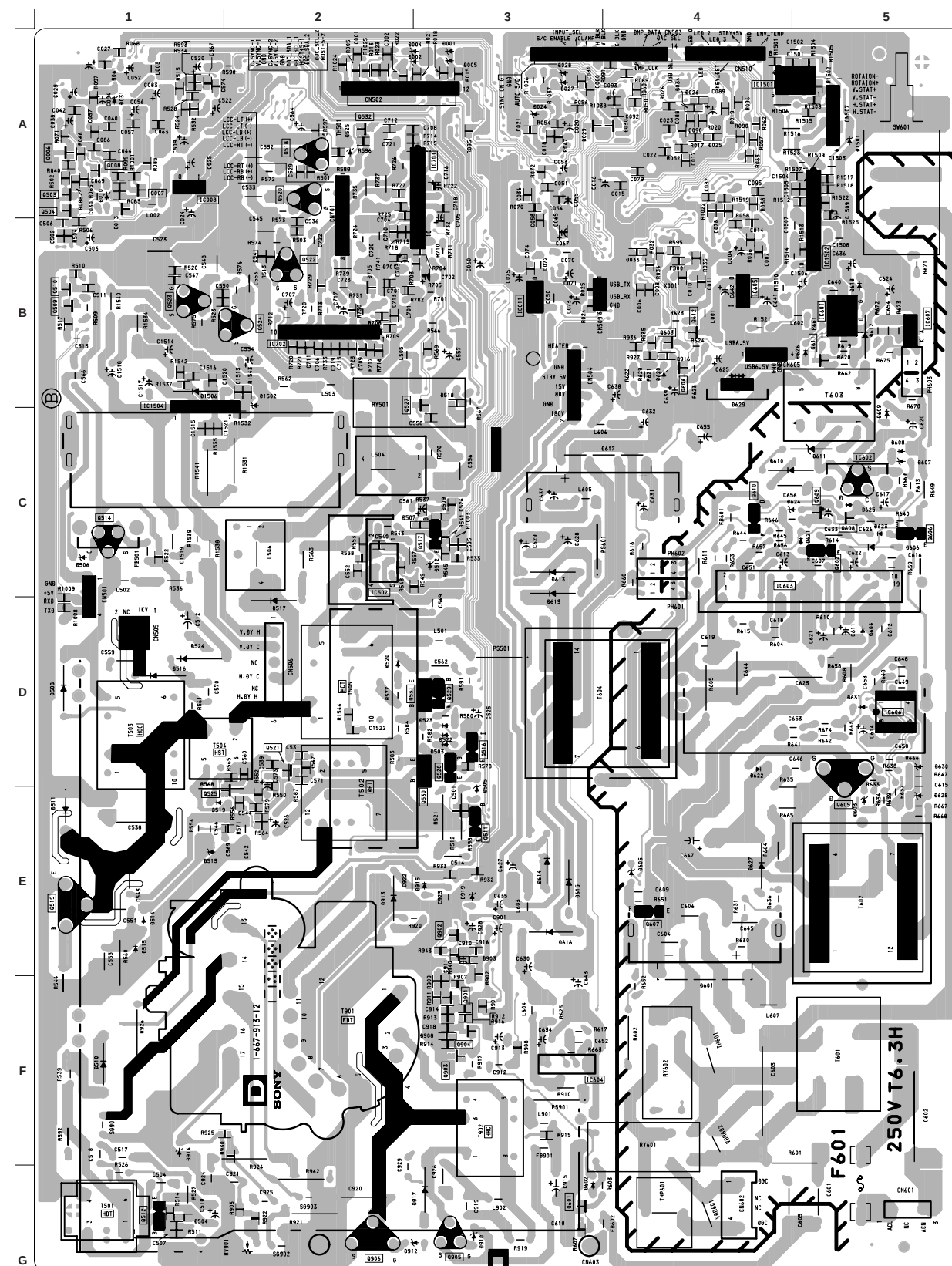
CN701 8P
S-MICRO

LT
LB
RT
RB

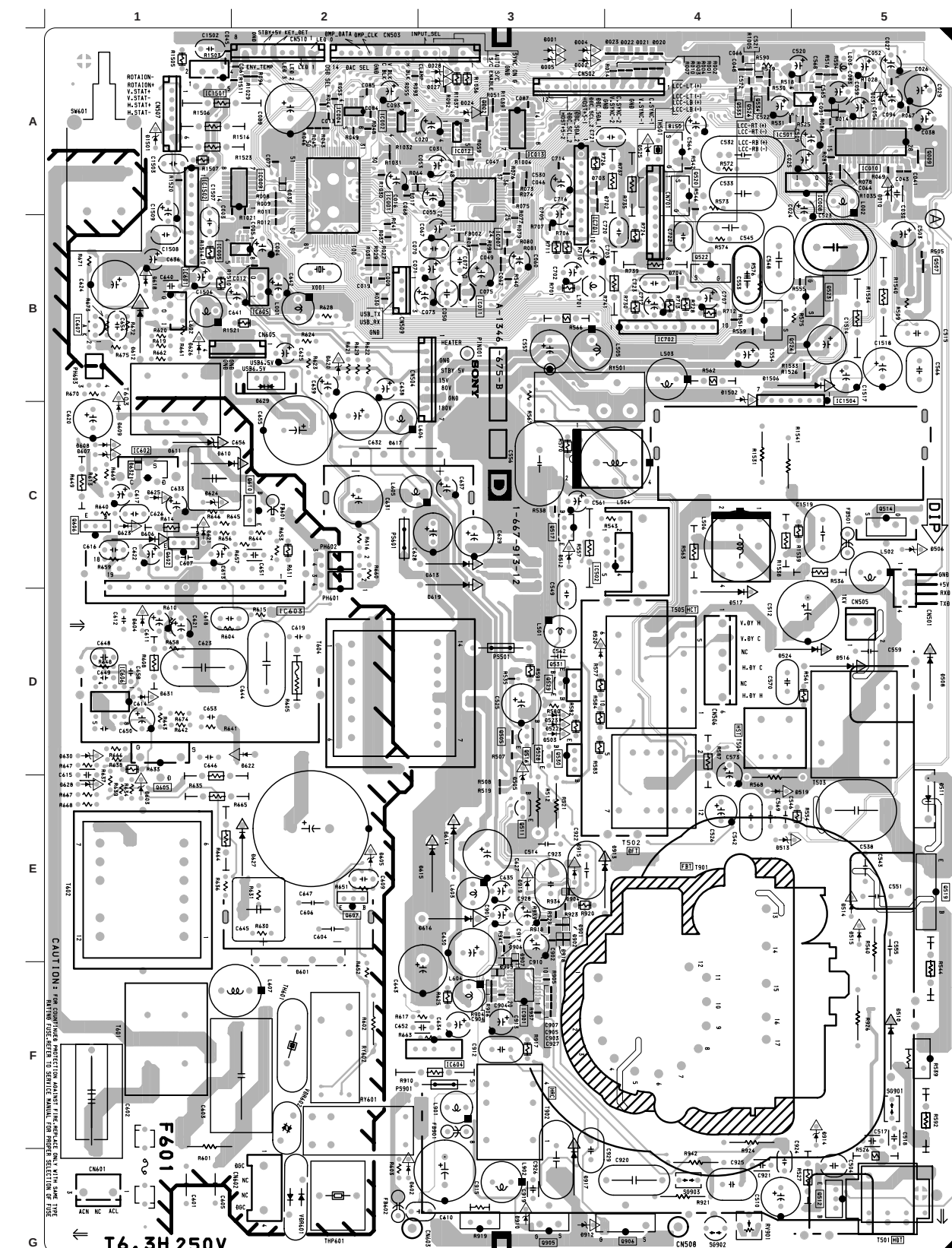
B-SS3426<J> >D-P2

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5-9



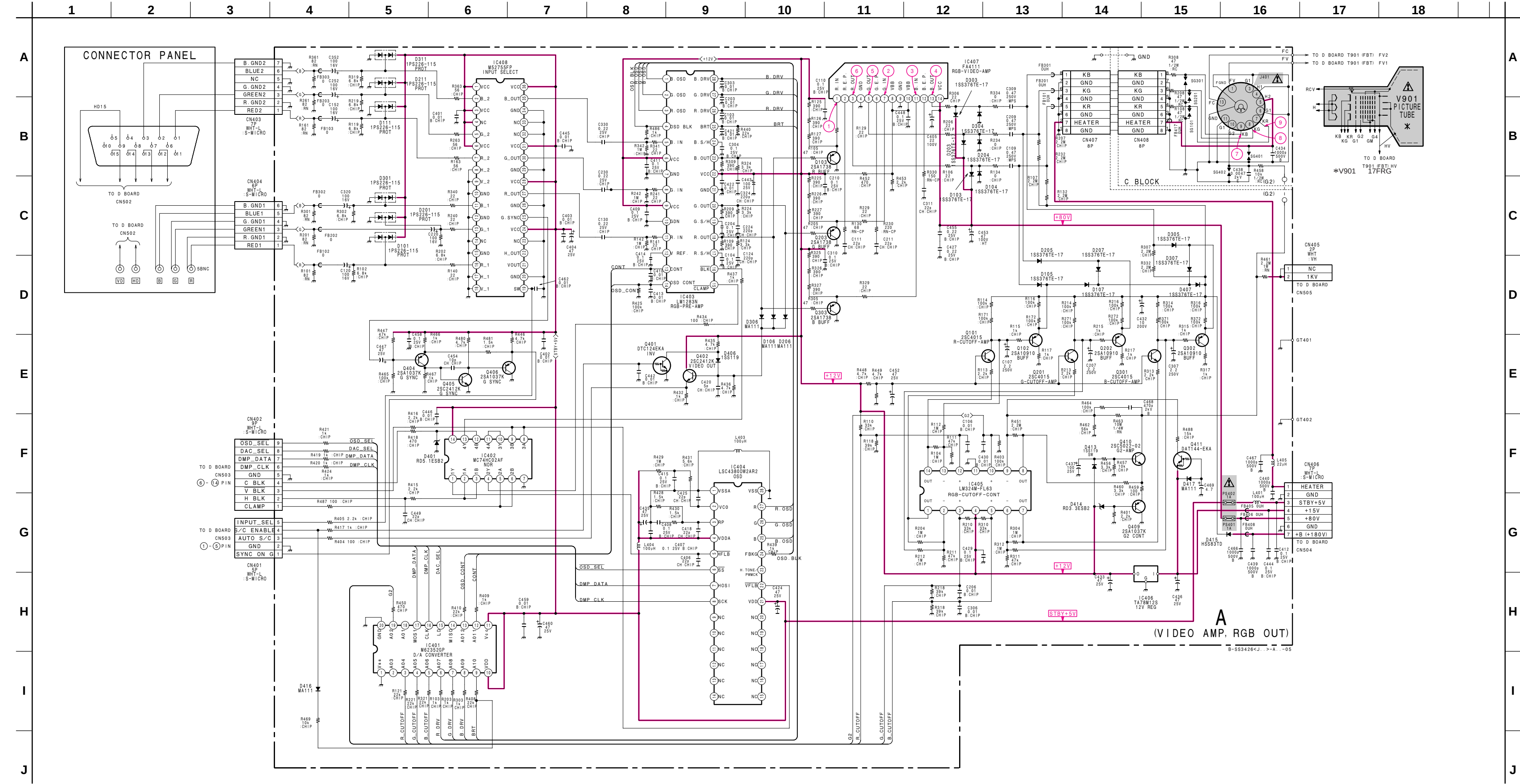
5-10



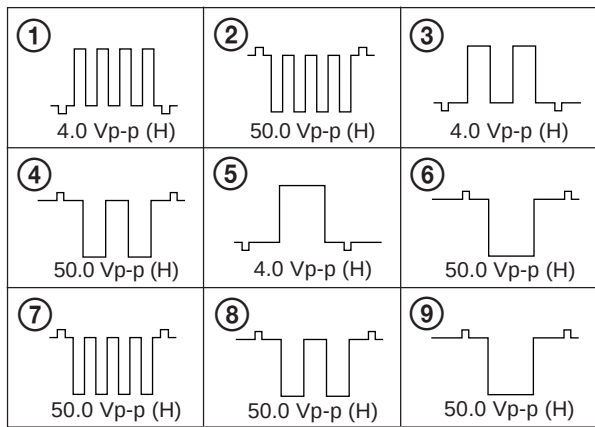
5-11

A board →

(3) Schematic Diagram of A Board



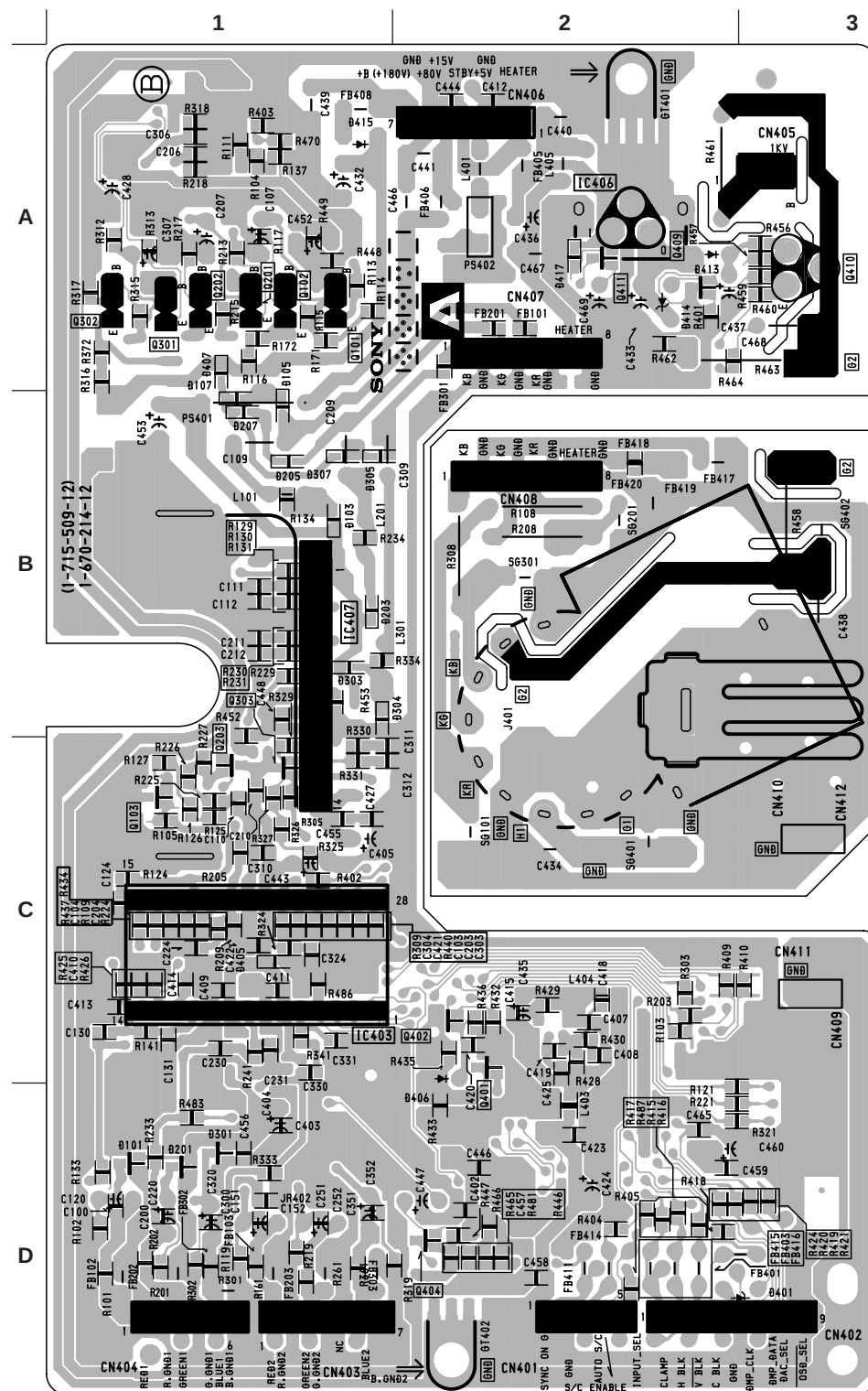
• A BOARD WAVEFORMS



• A BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC403	1	1.6	Q202	C	91.7
	2	1.6		E	5.2
	3	1.6		B	91.7
	4	0		C	0.6
	5	2.2	Q203	E	92.3
	8	2.2		B	1.9
	11	2.2	Q301	E	2.6
	12	2		B	5.8
IC407	13	1.7	Q302	C	92.1
	14	1.5		E	5.2
	15	4.8	Q303	B	92.1
	16	4		C	0.6
	17	6.7		E	92.7
	18	2.2	Q401	B	1.9
	19	6.8		C	2.6
	20	2.1		B	0
	23	2.1	Q410	E	6.1
	24	6.8		B	8.3
	25	1.5		C	7.8
Q101	26	3.4	Q102	B	8.3
	27	3.5		C	463
	28	3.4		E	7.8
			J401	B	70
Q103				KG	70
				KR	70
				G2	462
Q102				H2	6.2

— A BOARD (Conductor Side) —

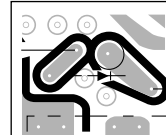
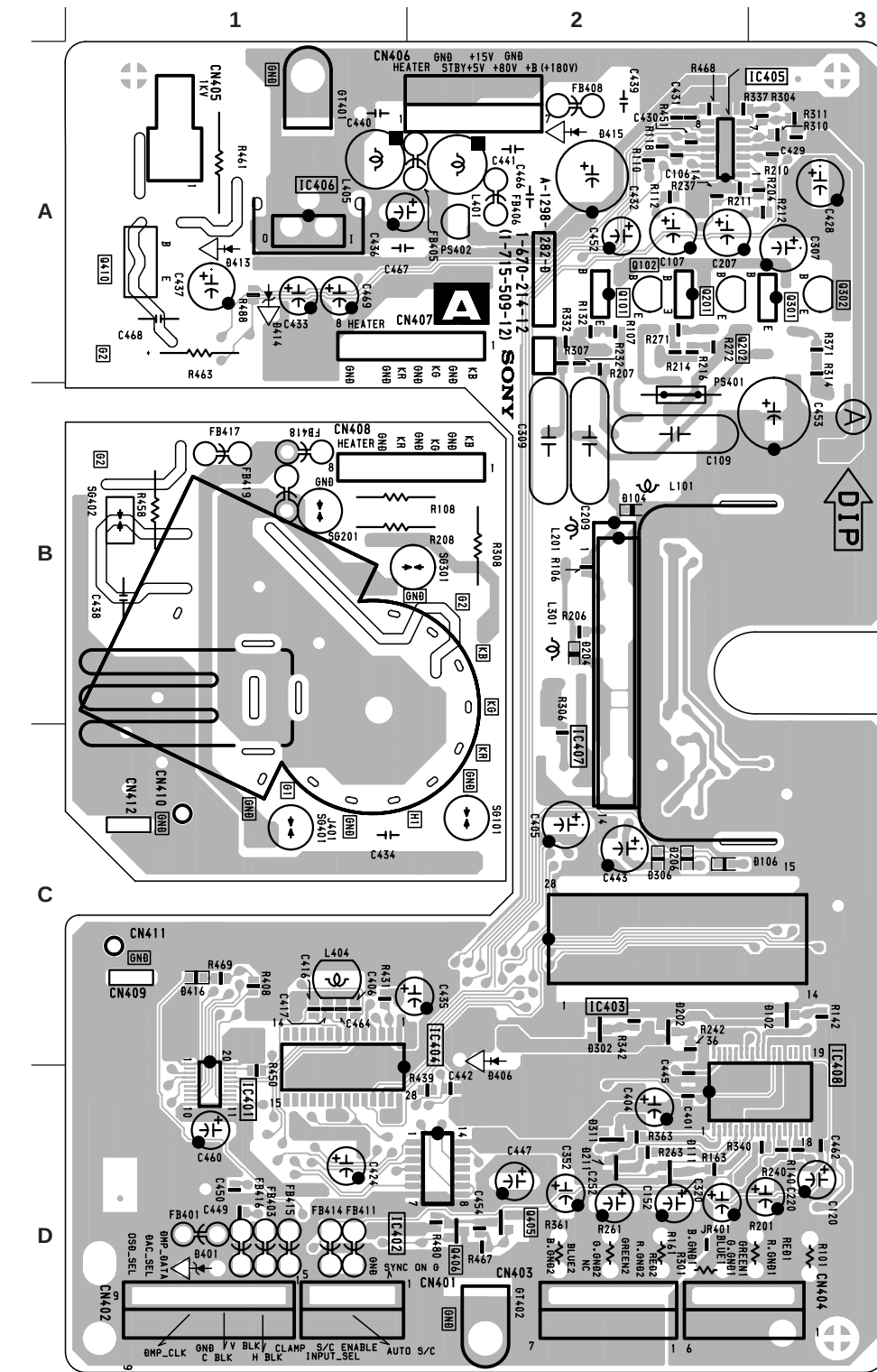


- A BOARD SEMICONDUCTOR LOCATION

IC			
	(Conductor Side)	(Component Side)	
IC401		D-1	
IC402		D-2	
IC403	C-1	C-2	
IC404		C-1	
IC405		A-2	
IC406	A-2	A-1	
IC407	B-1	B-2	
IC408		D-3	
TRANSISTOR			
	(Conductor Side)	(Component Side)	*
Q101	A-1	A-2	—
Q102	A-1	A-2	—
Q103	C-1		①
Q201	A-1	A-2	—
Q202	A-1	A-2	—
Q203	C-1		①
Q301	A-1	A-3	—
Q302	A-1	A-3	—
Q303	C-1		①
Q401	C-2		①
Q402	C-2		②
Q404	D-2		①
Q405		D-2	②
Q406		D-2	②
Q409	A-2		①
Q410	A-3		—
DIODE			
	(Conductor Side)	(Component Side)	*
D101	D-1		⑥
D103	B-1		③
D104		B-2	③
D105	B-1		③
D106		C-2	③
D107	B-1		③
D111		D-2	⑦
D201	D-1		⑥
D203	B-1		③
D204		B-2	③
D205	B-1		③
D206		C-2	③
D207	B-1		③
D211		D-2	⑦
D301	D-1		⑥
D303	B-1		③
D304	B-1		③
D305	B-1		③
D306		C-2	③
D307	B-1		③
D311		D-2	⑦
D401	D-3	D-1	—
D406	C-2	C-2	—
D407	A-1		③
D413	A-2	A-1	—
D414	A-2	A-1	—
D415	A-1	A-2	—
D416		C-1	③

***: Refer to Terminal name
of semiconductors in
silk screen printed
circuit (see page 5-4)**

— A BOARD (Component Side) —

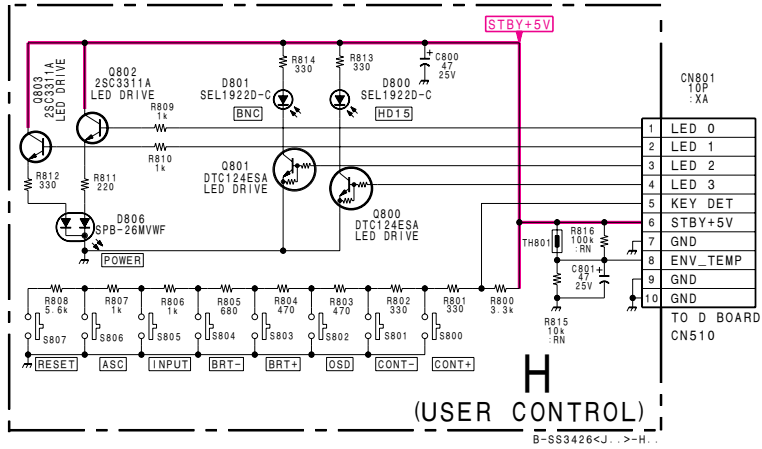


NOTE:
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.



[USER CONTROL]

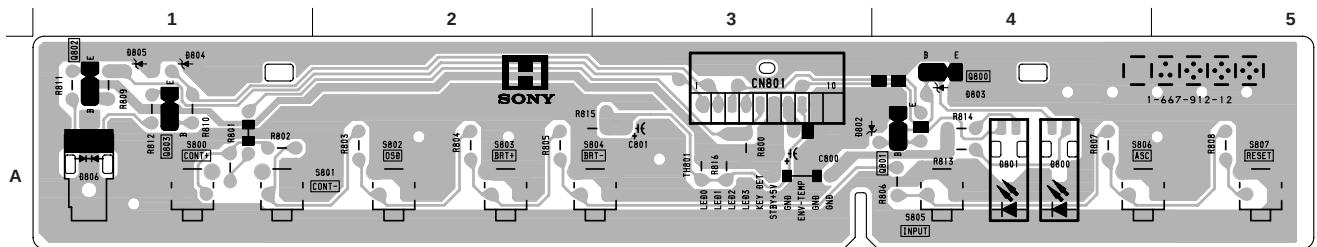
(4) Schematic Diagram of H Board



• H BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
Q800	B	5.1
	C	0.1
Q801	B	0
	C	4.0
Q802	B	5.1
	E	4.4
Q803	B	0
	E	0.4

— H BOARD —



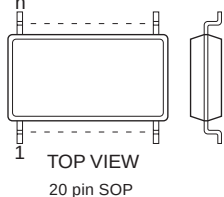
Schematic diagram



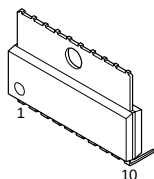
board

5-4. SEMICONDUCTORS

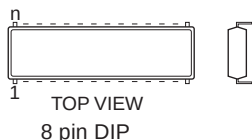
BA9756FS-E2
M62352GP-75E
M62352GP-75ED



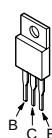
LA6510



MC33262P
MM1170BFB



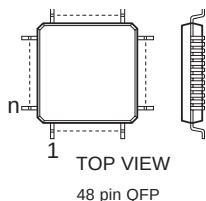
IRFI9630GS
2SC5022-02
2SJ449 (1)



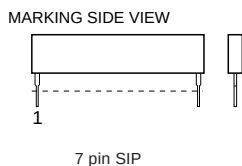
2SC4015TV2



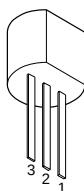
CXA2043Q



LA7841L



NJM78L09A
TA78L09S



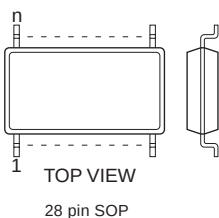
2SA1049-GR
2SC2459-GR



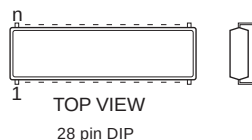
2SC5301-CC



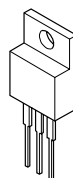
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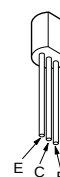
LM1283N



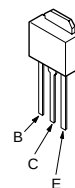
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TA78M12S



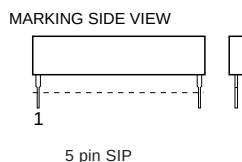
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2SC2362K-G
2SC3941A-Q (TA)



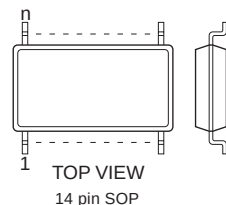
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DM-57N

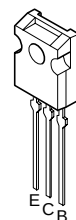


LM324M
MC74HCT14AFEL
MC74HC02AF
SN74HC02ANS
SN74HCT04ANS

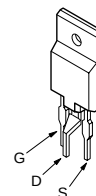


DTA114GKAT146
DTA124EKA-T146
DTA143ESA
DTC114GKA
DTC114GKAT146
DTC124EK
DTC124EKA-T146
2SA1036K-Q
2SA1036K-T-146-Q
2SA1037K-T-146-QR
2SA1738-TX
2SC1623-L5L6
2SC2412K-T-146-QR

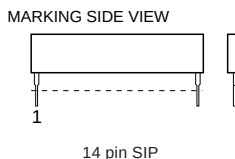
2SA1358-Y
2SC3421-Y



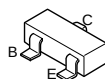
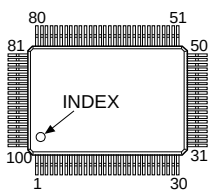
2SK2195F04



FA4111



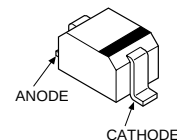
MB90553PF-G-120-BND



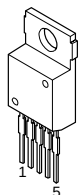
2SC2362KG-AA



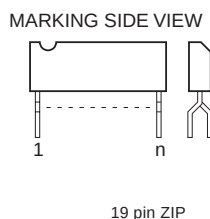
DTZ33B
DTZ5.1B
MA111-TX
RD12SB2
UDZ-TE-17-12B
UDZ-TE-17-33B
UDZ-TE-17-4.7B
UDZ-TE-17-5.1B



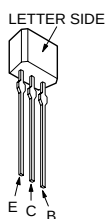
LA6500-FA



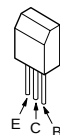
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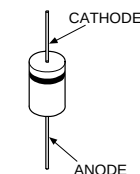
DTC114ESA
DTC124ESA
2SC2784
2SC2785-HFE
2SC3311A-QRSTA
2SC3311A-RTA



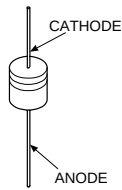
2SC3209LK



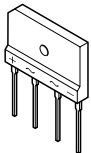
D1NL20U-TR
D2S4MF
D2S4MTA1



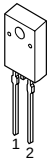
D1NS4
EGP10GPKG23
RD11ES-B1
RD12ES-B2
RD13ES-B2
RD16ES-B2
RD16ES-B3
RD22ES-B2
RD24ES-B2
RD24ES-B3
RD3.3ES-B2
RD5.1ES-B2
RD6.2ES-B2
RD6.8ES-B1
RD6.8ES-B3
1SS119-25TD
1SS119-25



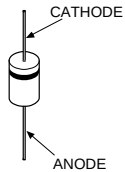
D2L40-TA
D4SBS4
D4SBS4-F
D4SB60L



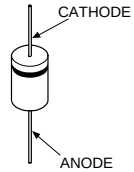
D5L60



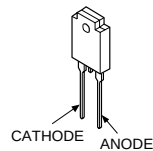
EGP10D
ERA91-02
S2L20UF



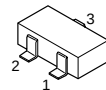
ERA22-06AVRBT
ERA22-08
GP08D
GP08DPKG23
HSS83TD
RGP02-17EL-6433
RGP02-17PKG23
S2L40F
UF4005PKG23



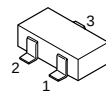
FMQ-G5FMS



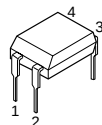
MA151WK
1SS184



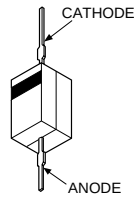
MA153-TX
1SS226
1PS226-115



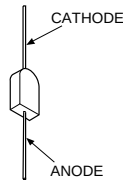
PC123F2
PC123FY2



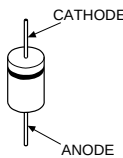
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SB340L-6489



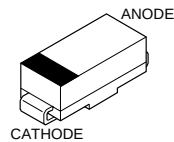
RM11A
RM11C



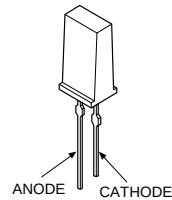
SB340



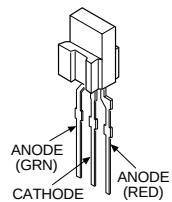
1SS376TE-17



SEL1922D-C



SPB-26MVWF



SECTION 6

EXPLODED VIEWS

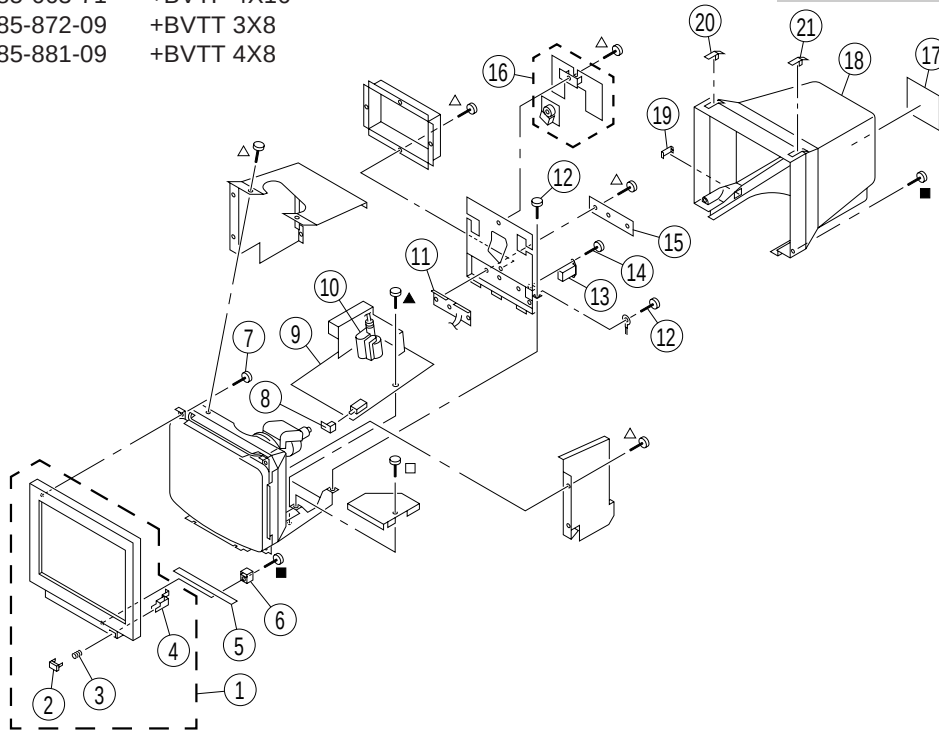
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

6-1. CHASSIS

- $\blacktriangle$ 7-685-646-79 +BVTP 3X8
- $\blacksquare$ 7-685-663-71 +BVTP 4X16
- $\triangle$ 7-685-872-09 +BVTT 3X8
- $\square$ 7-685-881-09 +BVTT 4X8



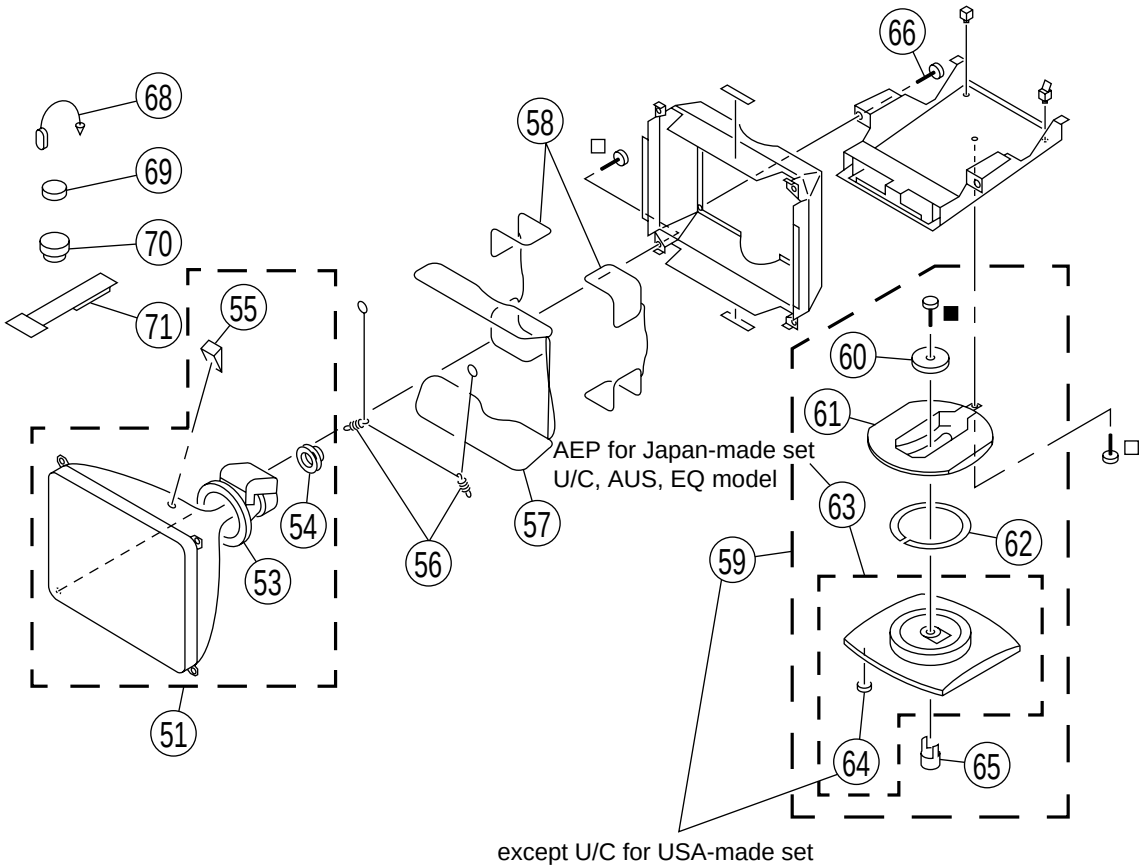
REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
1	X-4035-321-1	BEZEL ASSY [U/C for Japan-made set, AUS, EQ model]	2-4	11	1-694-347-12	TERMINAL BOARD ASSY, I/O	
1	X-4035-364-1	BEZEL ASSY [AEP for UK-made set, UK model]	2-4	12	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
1	X-4035-365-1	BEZEL ASSY [U/C for USA-made set]	2-4	13	Δ 1-251-382-22	INLET, AC 3P (WITH NOISE FILTER)	
1	X-4035-380-1	BEZEL ASSY [AEP for Japan-made set]	2-4	14	4-052-345-01	SCREW, (3X8) (+K), TAPPING	
2	4-062-203-01	BUTTON, POWER [U/C for Japan-made set, AUS, EQ model]		15	4-060-368-12	SHEET, CONNECTOR	
2	4-062-203-11	BUTTON, POWER [AEP for Japan-made set]		16	* 8-933-285-00	A BOARD, COMPLETE	
2	4-063-242-01	BUTTON, POWER [AEP for UK-made set, UK model]		17	* 4-063-123-01	LABEL, INFORMATION [U/C for USA-made set]	
2	4-063-252-01	BUTTON, POWER [U/C for USA-made set]		17	* 4-063-124-01	LABEL, INFORMATION [AEP for UK-made set, UK model]	
3	3-653-339-01	SPRING, COMPRESSION [AEP/U/C for Japan-made set, AUS, EQ model]		17	* 4-063-358-01	LABEL, INFORMATION [AEP for Japan-made set]	
3	3-653-339-11	SPRING, COMPRESSION [AEP for UK-made set, UK model]		17	* 4-063-436-03	LABEL, INFORMATION [U/C for Japan-made set]	
3	3-653-339-21	SPRING, COMPRESSION [U/C for USA-made set]		17	* 4-064-700-01	LABEL, INFORMATION [AUS model]	
4	4-062-199-01	BAR, EXTENSION [AEP/U/C for Japan-made set, AUS, EQ model]		17	* 4-064-966-02	LABEL, INFORMATION [EQ model]	
4	4-063-245-01	BAR, EXTENSION [AEP for UK-made set, UK model]		17	* 4-204-869-01	LABEL, INFORMATION [400PST9]	
4	4-063-255-01	BAR, EXTENSION [U/C for USA-made set]		18	4-062-206-01	CABINET [U/C for Japan-made set, AUS, EQ model]	
5	* 8-733-287-00	H BOARD, COMPLETE		18	4-062-206-11	CABINET [AEP for Japan-made set]	
6	* 4-062-196-01	STOPPER, PRINTED CIRCUIT BOARD [AEP/U/C for Japan-made set, AUS, EQ model]		18	4-063-241-01	CABINET [AEP for UK-made set, UK model]	
6	* 4-063-247-01	STOPPER, PRINTED CIRCUIT BOARD [AEP for UK-model set, UK model]		18	4-063-251-01	CABINET [U/C for USA-made set]	
6	* 4-063-257-01	STOPPER, PRINTED CIRCUIT BOARD [U/C for USA-made set]		19	4-062-195-01	COVER, ECS [U/C for Japan-made set, AUS, EQ model]	
7	4-203-648-01	SCREW (5), SELF TAPPING [AEP for UK-made set, UK model]		19	4-062-195-21	COVER, ECS [AEP for Japan-made set]	
7	4-365-808-01	SCREW (5), TAPPING [AEP for Japan-made set, U/C, AUS, EQ model]		19	4-063-246-01	COVER, ECS [AEP for UK-made set, UK model]	
8	* 4-394-972-21	CAP, POWER		19	4-063-256-01	COVER, ECS [U/C for USA-made set]	
9	* 8-933-284-00	D BOARD, COMPLETE		20	4-062-202-01	COVER (L), SCREW [U/C for Japan-made set, AUS, EQ model]	
10	Δ X-4035-425-1	TRANSFORMER ASSY, FLYBACK (NX-4500/J1E4)		20	4-062-202-21	COVER (L), SCREW [AEP for Japan-made set]	
				20	4-063-248-01	COVER (L), SCREW [AEP for UK-made set, UK model]	
				20	4-063-258-01	COVER (L), SCREW [U/C for USA-made set]	
				21	4-062-201-01	COVER (R), SCREW [U/C for Japan-made set, AUS, EQ model]	
				21	4-062-201-21	COVER (R), SCREW [AEP for Japan-made set]	
				21	4-063-249-01	COVER (R), SCREW [AEP for UK-made set, UK model]	
				21	4-063-259-01	COVER (R), SCREW [U/C for USA-made set]	

6-2. PICTURE TUBE

- 7-685-663-71 +BVTP 4X16
- 7-685-881-09 +BVTT 4X8

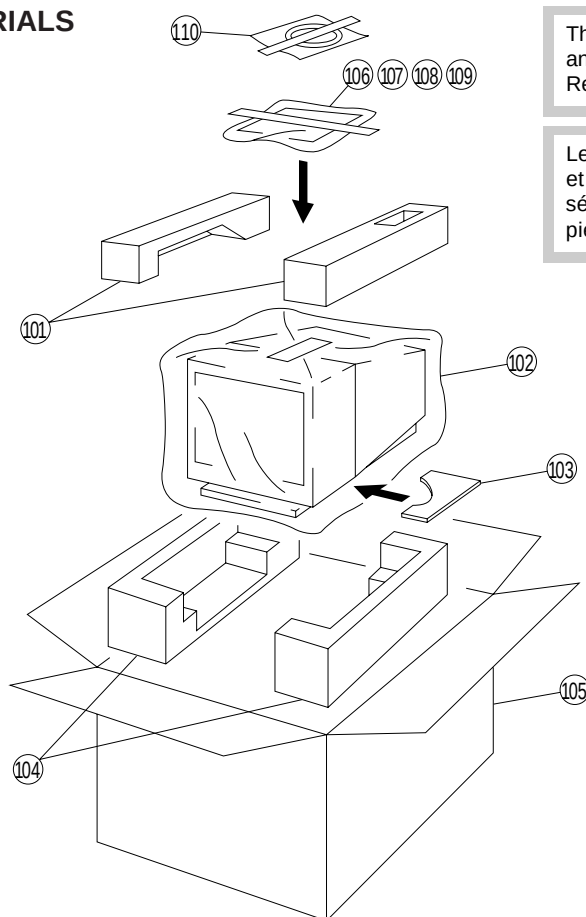
The components identified by shading and mark $\triangle$ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
51	$\triangle$ 8-736-400-82	ITC ASSY (19FRG-R1) [U/C, AEP, UK]		61	4-060-396-11	SLIDER [AEP/U/C for Japan-made set, AUS, EQ model]	
51	$\triangle$ 8-736-403-81	ITC ASSY (19FRG-RS1) [AUS, EQ model]	53-55	61	4-060-522-01	SLIDER [AEP for UK-made set, UK model]	
53	$\triangle$ 8-451-282-11	DEFLECTION YOKE (Y19FRJ-M)	53-55	61	4-060-698-01	SLIDER [U/C for USA-made set]	
54	$\triangle$ 1-452-932-11	NECK ASSEMBLY		62	4-060-339-01	RING, TILT SWIVEL [AEP/U/C for Japan-made set, AUS, EQ model]	
55	4-040-897-01	SPACER, DY [U/C for USA-made set]		62	4-060-643-01	RING, TILT SWIVEL [AEP for UK-made set, UK model]	
55	4-050-492-01	SPACER, DY [except U/C for USA-made set]		62	4-060-705-01	RING, TILT SWIVEL [U/C for USA-made set]	
56	* 4-047-316-01	SPRING, EXTENSION [except U/C for USA-made set]		63	X-4034-851-1	BASE ASSY, STAND [AEP/U/C for Japan-made set, AUS, EQ model]	64
56	* 4-061-573-01	SPRING, TENSION [U/C for USA-made set]		63	X-4034-890-1	BASE ASSY, STAND [U/C for USA-made set]	
57	$\triangle$ 1-416-529-11	COIL, DEMAGNETIC		64	4-047-474-01	FOOT, RUBBER [except U/C for USA-made set]	
58	$\triangle$ 1-416-140-12	COIL, LANDING CORRECTION		65	4-041-621-01	STOPPER (B) [except U/C for USA-made set]	
59	X-4034-847-1	STAND ASSY [AEP/U/C for Japan-made set, AUS, EQ model]	60-65	65	4-041-621-21	STOPPER (B) [U/C for USA-made set]	
59	X-4034-868-1	STAND ASSY [AEP for UK-made set, UK model]	60-65	66	4-389-025-01	SCREW (M4) (EXT TOOTH WASHER)	
60	4-060-340-01	STOPPER (A) [AEP/U/C for Japan-made set, AUS, EQ model]		68	4-308-870-00	CLIP, LEAD WIRE	
60	4-060-531-01	STOPPER, A [U/C for USA-made set]		69	1-452-032-00	MAGNET, DISC; 10mm ϕ	
60	4-060-644-02	STOPPER (A) [AEP for UK-made set, UK model]		70	1-452-094-00	MAGNET, ROTATABLE DISK; 15mm ϕ	
				71	4-059-493-01	PERMALLOY (90), CONV. CORRECT	

6-3. PACKING MATERIALS



The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
101	* 4-060-937-11	CUSHION (UPPER) (ASSY) [AEP/U/C for Japan-made set, AUS, EQ model]		105	* 4-063-380-01	INDIVIDUAL CARTON [AEP for UK-made set, UK model]	
101	* 4-063-373-01	CUSHION (UPPER) (ASSY) [U/C for USA-made set]		106	Δ 1-558-481-11	CORD, POWER (10A/250V) [AUS model]	
101	* 4-063-381-21	CUSHION (UPPER) (ASSY) [AEP for UK-made set, UK model]		106	Δ 1-765-718-11	CORD SET, POWER (10A/125V) [U/C model]	
102	* 4-041-927-31	BAG, POLYETHYLENE [AEP/U/C for Japan-made set, AUS, EQ model]		106	Δ 1-765-719-11	CORD SET, POWER (10A/250V) [AEP for Japan-made set, EQ model]	
102	* 4-060-490-01	BAG, POLYETHYLENE [AEP for UK-made set, UK model]		106	Δ 1-775-706-11	CORD SET, POWER (10A/250V) [UK model]	
102	* 4-041-927-11	BAG, POLYETHYLENE [U/C for USA-made set]		106	Δ 1-790-714-11	CORD SET, POWER (10A/250V) [AEP for UK-made set]	
103	* 4-061-451-01	PAD, TILT FIXED [AEP/U/C for Japan-made set, AUS, EQ model]		107	3-861-575-11	MANUAL, INSTRUCTION [U/C for Japan-made set, AUS, EQ model]	
103	* 4-063-379-01	PAD, FOR TILT FIXING [U/C for USA-made set]		107	3-861-575-21	MANUAL, INSTRUCTION [U/C for USA-made set]	
103	* 4-063-387-01	PAD, FOR TILT FIXING [AEP for UK-made set, UK model]		107	3-861-576-11	MANUAL, INSTRUCTION [AEP for Japan-made set]	
104	* 4-060-938-11	CUSHION (LOWER) (ASSY) [AEP/U/C for Japan-made set, AUS, EQ model]		107	3-861-576-31	MANUAL, INSTRUCTION [AEP for UK-made set, UK model]	
104	* 4-063-374-01	CUSHION (LOWER) (ASSY) [U/C for USA-made set]		107	3-861-576-61	MANUAL, INSTRUCTION [400PST9]	
104	* 4-063-382-21	CUSHION (LOWER) (ASSY) [AEP for UK-made set, UK model]		108	1-785-429-11	ADAPTOR, CONVERSION (for Mac)	
105	* 4-062-575-01	INDIVIDUAL CARTON [U/C for Japan-made set, AUS, EQ, model]		109	1-759-641-14	DISK, INFORMATION (WINDOWS) [except U/C for USA-made set]	
105	* 4-062-576-11	INDIVIDUAL CARTON [AEP for Japan-made set]		109	1-759-641-21	DISK, INFORMATION (V2.30) (WINDOWS, 3.5") [U/C for USA-made set]	
105	* 4-063-372-01	INDIVIDUAL CARTON [U/C for USA-made set]		110	1-777-743-11	CABLE ASSY (15P DSUB X 2 CONNECTOR) [AEP for Japan-made set, U/C, AUS, EQ model]	
105	* 4-204-871-01	INDIVIDUAL CARTON [400PST9]		110	1-790-212-11	CABLE ASSY [AEP for UK-made set, UK model]	

SECTION 7

ELECTRICAL PARTS LIST

**NOTE:**

The components identified by shading and mark $\triangle$ are critical for safety. Replace only with part number specified.

Les composants identifiés par un tramé et une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board name.

The components identified by $\triangle$ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS

• All resistors are in ohms
• F : nonflammable

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
	*8-933-285-00	A BOARD, COMPLETE *****		C404	1-104-664-11	ELECT 47 μ F	20% 25V
				C405	1-128-560-11	ELECT 22 μ F	20% 100V
				C406	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
	4-382-854-11	SCREW (M3X10), P, SW (+) (IC406, IC407)		C407	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
		<CAPACITOR>		C408	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C103	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C409	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C104	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C410	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C106	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C411	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C107	1-107-649-11	ELECT 2.2 μ F	20% 250V	C412	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C109	1-117-450-11	FILM 0.47 μ F	10% 250V	C413	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C110	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C414	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C111	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C415	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C120	1-126-933-11	ELECT 100 μ F	20% 16V	C418	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
C124	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	C420	1-163-222-11	CERAMIC CHIP 5pF	0.25pF 50V
C130	1-115-340-11	CERAMIC CHIP 0.22 μ F	10% 25V	C421	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C152	1-126-933-11	ELECT 100 μ F	20% 16V	C422	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C203	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C424	1-104-664-11	ELECT 47 μ F	20% 25V
C204	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C425	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
C206	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C427	1-115-340-11	CERAMIC CHIP 0.22 μ F	10% 25V
C207	1-107-649-11	ELECT 2.2 μ F	20% 250V	C429	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C209	1-117-450-11	FILM 0.47 μ F	10% 250V	C430	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C210	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C432	1-107-652-11	ELECT 10 μ F	20% 200V
C211	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C433	1-104-664-11	ELECT 47 μ F	20% 25V
C220	1-126-933-11	ELECT 100 μ F	20% 16V	C434	1-162-318-11	CERAMIC 0.001 μ F	10% 500V
C224	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	C435	1-104-664-11	ELECT 47 μ F	20% 25V
C230	1-115-340-11	CERAMIC CHIP 0.22 μ F	10% 25V	C436	1-104-664-11	ELECT 47 μ F	20% 25V
C252	1-126-933-11	ELECT 100 μ F	20% 16V	C437	1-104-665-11	ELECT 100 μ F	20% 25V
C303	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C438	1-162-114-00	CERAMIC 0.0047 μ F	2KV
C304	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C439	1-162-318-11	CERAMIC 0.001 μ F	10% 500V
C306	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C440	1-162-318-11	CERAMIC 0.001 μ F	10% 500V
C307	1-107-649-11	ELECT 2.2 μ F	20% 250V	C442	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C309	1-117-450-11	FILM 0.47 μ F	10% 250V	C443	1-128-526-11	ELECT 100 μ F	20% 25V
C310	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V	C444	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C311	1-163-235-11	CERAMIC CHIP 22pF	5% 50V	C445	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C320	1-126-933-11	ELECT 100 μ F	20% 16V	C446	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V
C324	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	C447	1-104-664-11	ELECT 47 μ F	20% 25V
C330	1-115-340-11	CERAMIC CHIP 0.22 μ F	10% 25V	C448	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V
C352	1-126-933-11	ELECT 100 μ F	20% 16V	C449	1-163-235-11	CERAMIC CHIP 22pF	5% 50V
C401	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C452	1-104-664-11	ELECT 47 μ F	20% 25V
C402	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C453	1-128-562-11	ELECT 47 μ F	20% 100V
C403	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	C454	1-163-227-11	CERAMIC CHIP 10pF	0.5pF 50V
				C455	1-115-340-11	CERAMIC CHIP 0.22 μ F	10% 25V
				C458	1-164-004-11	CERAMIC CHIP 0.1 μ F	10% 25V

GDM-400PS/400PST/400PST9



Les composants identifiés par un tramé et une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark $\triangle$ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C459	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	FB202	1-216-295-00	SHORT	0
C460	1-104-664-11	ELECT 47 μ F	20% 25V	FB203	1-216-295-00	SHORT	0
C462	1-163-021-91	CERAMIC CHIP 0.01 μ F	10% 50V	FB301	1-500-419-21	FERRITE	0
C466	1-162-318-11	CERAMIC 0.001 μ F	10% 500V	FB302	1-216-295-00	SHORT	0
C467	1-162-318-11	CERAMIC 0.001 μ F	10% 500V	FB303	1-216-295-00	SHORT	0
C468	1-162-134-11	CERAMIC 470pF	10% 2KV	FB405	1-412-911-31	FERRITE	1.1 μ H
C469	1-126-963-11	ELECT 4.7 μ F	20% 50V	FB406	1-412-911-31	FERRITE	1.1 μ H
<CONNECTOR>				FB408	1-412-911-31	FERRITE	1.1 μ H
CN401*	1-564-520-11	PLUG, CONNECTOR 5P		FB417	1-412-911-31	FERRITE	1.1 μ H
CN402*	1-564-524-11	PLUG, CONNECTOR 9P		FB420	1-216-295-00	SHORT	0
CN403*	1-564-522-11	PLUG, CONNECTOR 7P		<TERMINAL>			
CN404*	1-564-521-11	PLUG, CONNECTOR 6P		GT401*	1-537-738-21	TERMINAL, EARTH	
CN405*	1-766-179-11	PIN, CONNECTOR (PC BOARD) 2P		GT402*	1-537-738-21	TERMINAL, EARTH	
CN406*	1-564-522-11	PLUG, CONNECTOR 7P		<IC>			
CN412	1-695-915-11	TAB (CONTACT)		IC401	8-759-635-27	IC M62352GP-75E	
<DIODE>				IC402	8-759-925-72	IC SN74HC02ANS	
D101	8-719-062-51	DIODE 1PS226-115		IC403	8-759-445-85	IC LM1283N	
D103	8-719-052-12	DIODE 1SS376TE-17		IC404	8-759-566-26	IC LSC4380DW2AR2	
D104	8-719-052-12	DIODE 1SS376TE-17		IC405	8-759-502-82	IC LM324M	
D105	8-719-052-12	DIODE 1SS376TE-17		IC406	8-759-263-43	IC TA78M12S	
D106	8-719-404-50	DIODE MA111-TX		IC407	8-749-013-74	IC FA4111	
D107	8-719-052-12	DIODE 1SS376TE-17		IC408	8-759-522-86	IC M52755FP-TP	
D111	8-719-062-51	DIODE 1PS226-115		<SOCKET>			
D201	8-719-062-51	DIODE 1PS226-115		J401 $\triangle$	1-251-598-11	SOCKET, PICTURE TUBE	
D203	8-719-052-12	DIODE 1SS376TE-17		<CHIP CONDUCTOR>			
D204	8-719-052-12	DIODE 1SS376TE-17		JR401	1-216-295-00	SHORT	0
D205	8-719-052-12	DIODE 1SS376TE-17		<COIL>			
D206	8-719-404-50	DIODE MA111-TX		L401	1-412-537-31	INDUCTOR	100 μ H
D207	8-719-052-12	DIODE 1SS376TE-17		L403	1-412-963-11	INDUCTOR	100 μ H
D211	8-719-062-51	DIODE 1PS226-115		L404	1-414-189-31	INDUCTOR	100 μ H
D301	8-719-062-51	DIODE 1PS226-115		L405	1-412-529-11	INDUCTOR	22 μ H
D303	8-719-052-12	DIODE 1SS376TE-17		<IC LINK>			
D304	8-719-052-12	DIODE 1SS376TE-17		PS401 $\triangle$	1-533-590-31	LINK IC (1A/90V AC, 60V DC)	
D305	8-719-052-12	DIODE 1SS376TE-17		PS402 $\triangle$	1-532-637-91	LINK, IC (1A/150V)	
D306	8-719-404-50	DIODE MA111-TX		<TRANSISTOR>			
D307	8-719-052-12	DIODE 1SS376TE-17		Q101	8-729-041-66	TRANSISTOR 2SC4015TV2	
D311	8-719-062-51	DIODE 1PS226-115		Q102	8-729-200-17	TRANSISTOR 2SA1091-O	
D401	8-719-109-85	ZENER DIODE RD5.1ESB2		Q103	8-729-112-65	TRANSISTOR 2SA1462-Y33	
D406	8-719-911-19	DIODE 1SS119-25		Q201	8-729-041-66	TRANSISTOR 2SC4015TV2	
D407	8-719-052-12	DIODE 1SS376TE-17		Q202	8-729-200-17	TRANSISTOR 2SA1091-O	
D413	8-719-911-19	DIODE 1SS119-25		Q203	8-729-112-65	TRANSISTOR 2SA1462-Y33	
D414	8-719-109-66	ZENER DIODE RD3.3ESB2		Q301	8-729-041-66	TRANSISTOR 2SC4015TV2	
D415	8-719-051-85	DIODE HSS83TD		Q302	8-729-200-17	TRANSISTOR 2SA1091-O	
D416	8-719-404-50	DIODE MA111-TX		<FERRITE BEAD>			
D417	8-719-404-50	DIODE MA111-TX		FB101	1-500-419-21	FERRITE	
<FERRITE BEAD>				FB102	1-216-295-00	SHORT	0
FB101	1-500-419-21	FERRITE		FB103	1-216-295-00	SHORT	0
FB102	1-216-295-00	SHORT	0	FB201	1-500-419-21	FERRITE	
FB103	1-216-295-00	SHORT	0				
FB201	1-500-419-21	FERRITE					



REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
Q303	8-729-112-65	TRANSISTOR 2SA1462-Y33				R213	1-216-057-00	RES, CHIP 33K	5%	1/10W	
Q401	8-729-901-00	TRANSISTOR DTC124EK				R214	1-216-097-91	RES, CHIP 100K	5%	1/10W	
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6				R215	1-216-049-91	RES, CHIP 1K	5%	1/10W	
Q404	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				R216	1-216-097-91	RES, CHIP 100K	5%	1/10W	
Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6				R217	1-216-049-91	RES, CHIP 1K	5%	1/10W	
Q406	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				R218	1-216-689-11	RES, CHIP 39K	5%	1/10W	
Q409	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR				R221	1-216-081-00	RES, CHIP 22K	5%	1/10W	
Q410	8-729-032-61	TRANSISTOR 2SC5022-02				R224	1-216-061-00	RES, CHIP 3.3K	5%	1/10W	
Q411	8-729-027-38	TRANSISTOR DTA144EKA-T146				R225	1-216-039-00	RES, CHIP 390	5%	1/10W	
<RESISTOR>						R226	1-216-039-00	RES, CHIP 390	5%	1/10W	
R101	1-215-395-00	METAL 82	1%	1/4W		R227	1-216-039-00	RES, CHIP 390	5%	1/10W	
R103	1-216-049-91	RES, CHIP 1K	5%	1/10W		R229	1-216-009-91	RES, CHIP 22	5%	1/10W	
R104	1-216-121-91	RES, CHIP 1M	5%	1/10W		R230	1-216-635-11	METAL CHIP 220	0.50%	1/10W	
R105	1-216-017-91	RES, CHIP 47	5%	1/10W		R232	1-216-129-00	RES, CHIP 2.2M	5%	1/10W	
R106	1-216-009-00	RES, CHIP 22	5%	1/10W		R234	1-216-295-00	SHORT 0			
R107	1-216-129-00	RES, CHIP 2.2M	5%	1/10W		R240	1-216-009-91	RES, CHIP 22	5%	1/10W	
R108	1-219-742-11	CARBON 47	5%	1/2W		R241	1-216-009-91	RES, CHIP 22	5%	1/10W	
R109	1-216-039-00	RES, CHIP 390	5%	1/10W		R242	1-216-121-91	RES, CHIP 1M	5%	1/10W	
R110	1-216-085-00	RES, CHIP 33K	5%	1/10W		R261	1-215-395-00	METAL 82	1%	1/4W	
R111	1-216-089-91	RES, CHIP 47K	5%	1/10W		R263	1-216-009-91	RES, CHIP 22	5%	1/10W	
R112	1-216-121-91	RES, CHIP 1M	5%	1/10W		R271	1-216-097-91	RES, CHIP 100K	5%	1/10W	
R113	1-216-057-00	RES, CHIP 2.2K	5%	1/10W		R272	1-216-097-91	RES, CHIP 100K	5%	1/10W	
R114	1-216-097-91	RES, CHIP 100K	5%	1/10W		R301	1-215-395-00	METAL 82	1%	1/4W	
R115	1-216-049-91	RES, CHIP 1K	5%	1/10W		R303	1-216-049-91	RES, CHIP 1K	5%	1/10W	
R116	1-216-097-91	RES, CHIP 100K	5%	1/10W		R304	1-216-121-91	RES, CHIP 1M	5%	1/10W	
R117	1-216-049-91	RES, CHIP 1K	5%	1/10W		R305	1-216-017-91	RES, CHIP 47	5%	1/10W	
R118	1-216-689-11	RES, CHIP 39K	5%	1/10W		R306	1-216-009-91	RES, CHIP 22	5%	1/10W	
R121	1-216-081-00	RES, CHIP 22K	5%	1/10W		R307	1-216-129-00	RES, CHIP 2.2M	5%	1/10W	
R124	1-216-061-00	RES, CHIP 3.3K	5%	1/10W		R308	1-219-742-11	CARBON 47	5%	1/2W	
R125	1-216-039-00	RES, CHIP 390	5%	1/10W		R309	1-216-039-00	RES, CHIP 390	5%	1/10W	
R126	1-216-039-00	RES, CHIP 390	5%	1/10W		R310	1-216-085-00	RES, CHIP 33K	5%	1/10W	
R127	1-216-039-00	RES, CHIP 390	5%	1/10W		R311	1-216-089-91	RES, CHIP 47K	5%	1/10W	
R129	1-216-009-00	RES, CHIP 22	5%	1/10W		R312	1-216-121-91	RES, CHIP 1M	5%	1/10W	
R130	1-216-623-11	METAL CHIP 68	0.50%	1/10W		R313	1-216-057-00	RES, CHIP 2.2K	5%	1/10W	
R132	1-216-129-00	RES, CHIP 2.2M	5%	1/10W		R314	1-216-097-91	RES, CHIP 100K	5%	1/10W	
R134	1-216-295-00	SHORT 0				R315	1-216-049-91	RES, CHIP 1K	5%	1/10W	
R140	1-216-009-91	RES, CHIP 22	5%	1/10W		R316	1-216-097-91	RES, CHIP 100K	5%	1/10W	
R141	1-216-009-91	RES, CHIP 22	5%	1/10W		R317	1-216-049-91	RES, CHIP 1K	5%	1/10W	
R142	1-216-121-91	RES, CHIP 1M	5%	1/10W		R318	1-216-689-11	RES, CHIP 39K	5%	1/10W	
R161	1-215-395-00	METAL 82	1%	1/4W		R321	1-216-081-00	RES, CHIP 22K	5%	1/10W	
R163	1-216-009-91	RES, CHIP 22	5%	1/10W		R324	1-216-061-00	RES, CHIP 3.3K	5%	1/10W	
R171	1-216-097-91	RES, CHIP 100K	5%	1/10W		R325	1-216-039-00	RES, CHIP 390	5%	1/10W	
R172	1-216-097-91	RES, CHIP 100K	5%	1/10W		R326	1-216-039-00	RES, CHIP 390	5%	1/10W	
R201	1-215-395-00	METAL 82	1%	1/4W		R327	1-216-039-00	RES, CHIP 390	5%	1/10W	
R203	1-216-049-91	RES, CHIP 1K	5%	1/10W		R329	1-216-009-91	RES, CHIP 22	5%	1/10W	
R204	1-216-121-91	RES, CHIP 1M	5%	1/10W		R330	1-216-631-11	METAL CHIP 150	0.50%	1/10W	
R205	1-216-017-91	RES, CHIP 47	5%	1/10W		R332	1-216-129-00	RES, CHIP 2.2M	5%	1/10W	
R206	1-216-009-91	RES, CHIP 22	5%	1/10W		R334	1-216-295-00	SHORT 0			
R207	1-216-129-00	RES, CHIP 2.2M	5%	1/10W		R340	1-216-009-91	RES, CHIP 22	5%	1/10W	
R208	1-219-742-11	CARBON 47	5%	1/2W		R341	1-216-009-91	RES, CHIP 22	5%	1/10W	
R209	1-216-039-00	RES, CHIP 390	5%	1/10W		R342	1-216-121-91	RES, CHIP 1M	5%	1/10W	
R210	1-216-085-00	RES, CHIP 39K	5%	1/10W		R361	1-215-395-00	METAL 82	1%	1/4W	
R211	1-216-089-91	RES, CHIP 47K	5%	1/10W		R363	1-216-009-91	RES, CHIP 22	5%	1/10W	
R212	1-216-121-91	RES, CHIP 1M	5%	1/10W		R371	1-216-097-91	RES, CHIP 100K	5%	1/10W	
						R372	1-216-097-91	RES, CHIP 100K	5%	1/10W	
						R401	1-216-057-00	RES, CHIP 2.2K	5%	1/10W	

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R403	1-216-097-91	RES, CHIP	100K	5%	1/10W	<SPARK GAP>	
R404	1-216-025-91	RES, CHIP	100	5%	1/10W		
R405	1-216-057-00	RES, CHIP	2.2K	5%	1/10W	SG101	1-517-499-21 GAP, SPARK
R408	1-216-081-00	RES, CHIP	22K	5%	1/10W	SG201	1-517-499-21 GAP, SPARK
R409	1-216-049-91	RES, CHIP	1K	5%	1/10W	SG301	1-517-499-21 GAP, SPARK
						SG401	1-517-499-21 GAP, SPARK
						SG402	1-519-422-11 GAP, SPARK
R410	1-216-081-00	RES, CHIP	22K	5%	1/10W		
R415	1-216-057-00	RES, CHIP	2.2K	5%	1/10W		
R416	1-216-057-00	RES, CHIP	2.2K	5%	1/10W		
R417	1-216-049-91	RES, CHIP	1K	5%	1/10W		
R418	1-216-041-00	RES, CHIP	470	5%	1/10W	*****	
R419	1-216-049-91	RES, CHIP	1K	5%	1/10W	* 8-933-284-00 D BOARD, COMPLETE	
R420	1-216-049-91	RES, CHIP	1K	5%	1/10W	*****	
R421	1-216-049-91	RES, CHIP	1K	5%	1/10W		
R424	1-216-049-91	RES, CHIP	1K	5%	1/10W	1-533-223-11 HOLDER, FUSE (F601)	
R425	1-216-097-91	RES, CHIP	100K	5%	1/10W	2-371-561-00 BUSHING (P), INSULATING (IC502)	
						3-710-578-01 COVER, VOLUME, 6 MOLD (RV901)	
R428	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W	4-060-842-01 SHEET, INSULATING (IC502)	
R429	1-216-121-91	RES, CHIP	1M	5%	1/10W	4-060-844-01 SHEET, INSULATING (IC1504)	
R430	1-216-053-00	RES, CHIP	1.5K	5%	1/10W		
R431	1-216-067-00	RES, CHIP	5.6K	5%	1/10W	4-382-854-11 SCREW (M3X10), P, SW (+)	
R432	1-216-049-91	RES, CHIP	1K	5%	1/10W	(IC HOLDER, IC502, IC603 IC1504, Q514, Q530, Q531, Q605, Q905, Q906, D511, D601, D617, D622, R539, R919)	
R434	1-216-025-91	RES, CHIP	100	5%	1/10W	7-685-646-79 SCREW +BVTP 3X8 TYPE2 IT-3	
R435	1-216-065-91	RES, CHIP	4.7K	5%	1/10W		
R436	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	<CAPACITOR>	
R437	1-216-049-91	RES, CHIP	1K	5%	1/10W		
R439	1-216-049-91	RES, CHIP	1K	5%	1/10W	C001	1-163-009-11 CERAMIC CHIP 0.001μF 10% 50V
						C002	1-163-009-11 CERAMIC CHIP 0.001μF 10% 50V
R440	1-216-081-00	RES, CHIP	22K	5%	1/10W	C003	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R446	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	C004	1-104-664-11 ELECT 47μF 20% 25V
R447	1-216-089-91	RES, CHIP	47K	5%	1/10W	C005	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R448	1-216-065-91	RES, CHIP	4.7K	5%	1/10W		
R449	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	C006	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
						C007	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R450	1-216-041-00	RES, CHIP	470	5%	1/10W	C008	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R451	1-216-129-00	RES, CHIP	2.2M	5%	1/10W	C009	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R452	1-216-041-00	RES, CHIP	470	5%	1/10W	C010	1-163-237-11 CERAMIC CHIP 27pF 5% 50V
R453	1-216-057-00	RES, CHIP	2.2K	5%	1/10W		
R456	1-216-061-00	RES, CHIP	3.3K	5%	1/10W	C011	1-163-237-11 CERAMIC CHIP 27pF 5% 50V
						C012	1-163-009-11 CERAMIC CHIP 0.001μF 10% 50V
R457	1-216-073-00	RES, CHIP	10K	5%	1/10W	C013	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R458	1-219-749-91	CARBON	10K	5%	1/2W	C014	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R459	1-216-025-91	RES, CHIP	100	5%	1/10W	C015	1-163-009-11 CERAMIC CHIP 0.001μF 10% 50V
R460	1-216-061-00	RES, CHIP	3.3K	5%	1/10W		
R461	1-211-885-21	METAL	2.2M	5%	1W	C016	1-104-664-11 ELECT 47μF 20% 25V
						C017	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R462	1-216-091-00	RES, CHIP	56K	5%	1/10W	C021	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R463	1-211-895-11	METAL	10M	10%	1/4W	C022	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R464	1-216-097-91	RES, CHIP	100K	5%	1/10W	C023	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R465	1-216-097-91	RES, CHIP	100K	5%	1/10W		
R466	1-216-049-91	RES, CHIP	1K	5%	1/10W	C024	1-104-664-11 ELECT 47μF 20% 25V
						C025	1-104-664-11 ELECT 47μF 20% 25V
R467	1-216-049-91	RES, CHIP	1K	5%	1/10W	C026	1-163-275-11 CERAMIC CHIP 0.001μF 5% 50V
R469	1-216-073-00	RES, CHIP	10K	5%	1/10W	C027	1-126-961-11 ELECT 2.2μF 20% 50V
R480	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	C029	1-126-935-11 ELECT 470μF 20% 16V
R481	1-216-053-00	RES, CHIP	1.5K	5%	1/10W		
R486	1-216-049-91	RES, CHIP	1K	5%	1/10W	C030	1-137-372-11 FILM 0.022μF 5% 50V
						C031	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V
R487	1-216-025-91	RES, CHIP	100	5%	1/10W	C036	1-163-021-91 CERAMIC CHIP 0.01μF 10% 50V
R488	1-216-077-00	RES, CHIP	15K	5%	1/10W	C037	1-164-690-91 CERAMIC CHIP 0.0022μF 5% 50V
						C038	1-126-960-11 ELECT 1μF 20% 50V
						C040	1-163-137-00 CERAMIC CHIP 680pF 5% 50V
						C041	1-164-004-11 CERAMIC CHIP 0.1μF 10% 25V

The components identified by shading
and mark $\triangle$ are critical for safety.
Replace only with part number specified.

Les composants identifiés par un tramé
et une marque $\triangle$ sont critiques pour la
sécurité. Ne les remplacer que par une
pièce portant le numéro spécifié.

GDM-400PS/400PST/400PST9



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C042	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C507	1-163-037-11	CERAMIC CHIP 0.022μF	10% 50V
C043	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C509	1-104-664-11	ELECT 47μF	20% 25V
C044	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V				
C045	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C510	1-126-941-11	ELECT 470μF	20% 25V
C046	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C511	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V
C047	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C512	1-110-641-51	ELECT 33μF	20% 200V
C048	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	C514	1-164-281-11	CERAMIC 0.001μF	2KV
C049	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C515	1-106-383-00	MYLAR 0.047μF	10% 200V
C050	1-137-194-81	FILM 0.47μF	5% 50V	C517	1-137-368-11	FILM 0.0047μF	5% 50V
C051	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V	C518	1-137-368-11	FILM 0.0047μF	5% 50V
C052	1-126-963-11	ELECT 4.7μF	20% 50V	C520	1-104-664-11	ELECT 47μF	20% 25V
C053	1-126-960-11	ELECT 1μF	20% 50V	C521	1-164-182-11	CERAMIC CHIP 0.0033μF	10% 50V
C054	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C522	1-126-963-11	ELECT 4.7μF	20% 50V
C055	1-126-964-11	ELECT 10μF	20% 50V	C523	1-117-955-11	FILM 0.17μF	5% 400V
C056	1-126-964-11	ELECT 10μF	20% 50V	C524	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V
C057	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C525	1-128-562-11	ELECT 47μF	20% 100V
C058	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	C526	1-128-561-91	ELECT 33μF	20% 100V
C059	1-163-257-11	CERAMIC CHIP 180pF	5% 50V	C529	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C060	1-126-964-11	ELECT 10μF	20% 50V	C530	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V
C061	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C532	1-115-519-11	FILM 0.56μF	5% 250V
C062	1-104-760-11	CERAMIC CHIP 0.047μF	10% 50V	C533	1-115-515-11	FILM 0.27μF	5% 250V
C063	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C536	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C064	1-163-037-11	CERAMIC CHIP 0.022μF	10% 50V	C538	1-117-959-11	FILM 4700pF	3% 1.8KV
C065	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C540	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V
C066	1-163-017-00	CERAMIC CHIP 0.0047μF	10% 50V	C541	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C067	1-126-964-11	ELECT 10μF	20% 50V	C542	1-117-948-91	FILM 1500pF	5% 630V
C068	1-163-251-11	CERAMIC CHIP 100pF	5% 50V	C543	1-162-558-11	CERAMIC 100pF	10% 2KV
C070	1-130-495-00	FILM 0.1μF	5% 50V	C545	1-115-512-11	FILM 0.15μF	5% 250
C071	1-126-960-11	ELECT 1μF	20% 50V	C546	1-107-597-11	CERAMIC 22pF	5% 500V
C072	1-130-495-00	FILM 0.1μF	5% 50V	C547	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C073	1-126-964-11	ELECT 10μF	20% 50V	C548	1-115-509-11	FILM 0.068μF	5% 250V
C074	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C549	1-130-495-00	FILM 0.1μF	5% 50V
C075	1-104-665-11	ELECT 100μF	20% 25V	C550	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C077	1-163-231-11	CERAMIC CHIP 15pF	5% 50V	C551	1-162-558-11	CERAMIC 100pF	10% 2KV
C078	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C552	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C079	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C553	1-117-953-11	FILM 0.033μF	5% 400V
C081	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C554	1-107-665-11	ELECT 0.47μF	20% 400V
C083	1-104-664-11	ELECT 47μF	20% 25V	C555	1-162-134-11	CERAMIC 470pF	10% 2KV
C084	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	C556	1-115-522-11	FILM 1μF	5% 250V
C085	1-163-243-11	CERAMIC CHIP 47pF	5% 50V	C557	1-107-683-11	ELECT 2.2μF	0 250V
C086	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C558	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V
C087	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C559	1-164-281-11	CERAMIC 0.001μF	2KV
C088	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C560	1-163-019-00	CERAMIC CHIP 0.0068μF	10% 50V
C089	1-117-722-11	ELECT 2200μF	20% 10V	C561	1-104-664-11	ELECT 47μF	20% 25V
C090	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C562	1-164-281-11	CERAMIC 0.001μF	2KV
C091	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	C564	1-126-960-11	ELECT 1μF	20% 50V
C092	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	C565	1-163-251-11	CERAMIC CHIP 100pF	5% 50V
C093	1-126-964-11	ELECT 10μF	20% 50V	C566	1-106-383-00	MYLAR 0.047μF	10% 200V
C094	1-104-664-11	ELECT 47μF	10% 25V	C567	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V
C096	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C568	1-164-161-11	CERAMIC CHIP 0.0022μF	10% 50V
C501	1-163-005-11	CERAMIC CHIP 470pF	10% 50V	C569	1-107-597-11	CERAMIC 22pF	5% 500V
C502	1-163-259-91	CERAMIC CHIP 220pF	5% 50V	C570	1-113-481-11	FILM 1000pF	5% 630V
C503	1-126-967-11	ELECT 47μF	20% 50V	C571	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V
C504	1-137-194-81	FILM 0.47μF	5% 50V	C572	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V
C505	1-163-009-11	CERAMIC CHIP 0.001μF	10% 50V	C573	1-104-665-11	ELECT 100μF	20% 25V
C506	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	C574	1-163-275-11	CERAMIC CHIP 0.001μF	5% 50V
				C601 $\triangle$	1-113-900-51	CERAMIC 470pF	10% 250V

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REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C602	1-107-533-51	FILM	1μF 20% 250V	C707	1-104-664-11	ELECT	47μF 20% 25V
C603	1-107-533-51	FILM	1μF 20% 250V	C708	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C604	1-113-926-91	CERAMIC	0.0047μF 250V	C709	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C605	1-113-900-51	CERAMIC	470pF 10% 250V	C710	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C606	1-113-926-91	CERAMIC	0.0047μF 250V	C711	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C609	1-130-495-00	FILM	0.1μF 5% 50V	C712	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C610	1-130-495-00	FILM	0.1μF 5% 50V	C713	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C611	1-126-964-11	ELECT	10μF 20% 50V	C714	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C613	1-126-963-11	ELECT	4.7μF 20% 50V	C715	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C614	1-104-665-11	ELECT	100μF 20% 25V	C716	1-104-664-11	ELECT	47μF 20% 25V
C615	1-137-370-11	FILM	0.01μF 5% 50V	C717	1-104-664-11	ELECT	47μF 20% 25V
C616	1-130-495-00	FILM	0.1μF 5% 50V	C718	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C617	1-104-665-11	ELECT	100μF 20% 10V	C719	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C618	1-130-029-00	FILM	8200pF 2% 50V	C720	1-130-495-00	FILM	0.1μF 5% 50V
C620	1-126-969-11	ELECT	220μF 20% 50V	C721	1-130-495-00	FILM	0.1μF 5% 50V
C621	1-126-964-11	ELECT	10μF 20% 50V	C722	1-130-495-00	FILM	0.1μF 5% 50V
C622	1-126-964-11	ELECT	10μF 20% 50V	C723	1-130-495-00	FILM	0.1μF 5% 50V
C623	1-119-867-11	MYLAR	0.047μF 3% 1KV	C901	1-126-961-11	ELECT	2.2μF 20% 50V
C624	1-126-768-11	ELECT	2200μF 20% 16V	C902	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C625	1-126-795-11	ELECT	10μF 20% 25V	C903	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C626	1-130-495-00	FILM	0.1μF 5% 50V	C904	1-163-243-11	CERAMIC CHIP	47pF 5% 50V
C627	1-128-564-11	ELECT	220μF 20% 100V	C905	1-163-145-00	CERAMIC CHIP	0.0015μF 5% 50V
C628	1-126-927-11	ELECT	2200μF 20% 10V	C906	1-163-021-91	CERAMIC CHIP	0.01μF 10% 50V
C629	1-126-927-11	ELECT	2200μF 20% 10V	C907	1-163-275-11	CERAMIC CHIP	0.001μF 5% 50V
C630	1-128-564-11	ELECT	220μF 20% 100V	C910	1-126-934-11	ELECT	220μF 20% 16V
C631	1-126-943-11	ELECT	2200μF 20% 25V	C911	1-163-259-91	CERAMIC CHIP	220pF 5% 50V
C632	1-126-943-11	ELECT	2200μF 20% 25V	C912	1-106-383-00	MYLAR	0.047μF 10% 200V
C633	1-126-960-11	ELECT	1μF 20% 50V	C913	1-126-967-11	ELECT	47μF 20% 50V
C634	1-107-950-11	ELECT	3.3μF 20% 200V	C914	1-104-760-11	CERAMIC CHIP	0.047μF 10% 50V
C635	1-128-581-11	ELECT	4.7μF 20% 100V	C915	1-110-641-51	ELECT	33μF 20% 200V
C636	1-104-664-11	ELECT	47μF 20% 25V	C916	1-163-021-91	CERAMIC CHIP	0.01μF 10% 50V
C637	1-104-664-11	ELECT	47μF 20% 25V	C917	1-163-017-00	CERAMIC CHIP	0.0047μF 10% 50V
C638	1-104-664-11	ELECT	47μF 20% 25V	C918	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C639	1-104-664-11	ELECT	47μF 20% 25V	C919	1-137-368-11	FILM	0.0047μF 5% 50V
C640	1-137-370-11	FILM	0.01μF 5% 50V	C920	1-117-626-11	FILM	2000pF 3% 1.2KV
C641	1-107-888-11	ELECT	47μF 20% 25V	C921	1-137-372-11	FILM	0.022μF 5% 50V
C642	1-107-888-11	ELECT	47μF 20% 25V	C922	1-106-228-00	MYLAR	0.22μF 10% 100V
C643	1-128-564-11	ELECT	220μF 20% 100V	C923	1-106-220-00	MYLAR	0.1μF 10% 100V
C644	1-119-867-11	MYLAR	0.047μF 3% 1KV	C924	1-106-355-12	MYLAR	0.0033μF 10% 200V
C645	1-137-479-11	FILM	1μF 10% 400V	C925	1-106-220-00	MYLAR	0.1μF 10% 100V
C646	1-107-792-11	CERAMIC	100pF 5% 1KV	C926	1-136-105-00	FILM	0.33μF 5% 200V
C647	1-113-707-11	ELECT(BLOCK)	220μF 20% 450V	C927	1-163-009-11	CERAMIC CHIP	0.001μF 10% 50V
C648	1-136-169-00	FILM	0.22μF 5% 50V	C928	1-104-665-11	ELECT	100μF 20% 25V
C650	1-102-074-00	CERAMIC	0.001μF 10% 50V	C929	1-106-383-00	MYLAR	0.047μF 10% 200V
C651	1-137-370-11	FILM	0.01μF 5% 50V	C1501	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V
C652	1-137-370-11	FILM	0.01μF 5% 50V	C1502	1-130-495-00	FILM	0.1μF 5% 50V
C653	1-101-821-00	CERAMIC	0.0022μF 500V	C1503	1-130-495-00	FILM	0.1μF 5% 50V
C658	1-102-121-00	CERAMIC	0.0022μF 50V	C1504	1-164-161-11	CERAMIC CHIP	0.0022μF 10% 50V
C659	1-163-021-91	CERAMIC CHIP	0.01μF 10% 50V	C1505	1-163-003-11	CERAMIC CHIP	330pF 10% 50V
C660	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V	C1506	1-104-664-11	ELECT	47μF 20% 25V
C701	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V	C1507	1-130-495-00	FILM	0.1μF 5% 50V
C702	1-104-664-11	ELECT	47μF 20% 25V	C1508	1-130-495-00	FILM	0.1μF 5% 50V
C703	1-126-934-11	ELECT	220μF 20% 10V	C1509	1-104-664-11	ELECT	47μF 20% 25V
C704	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V	C1513	1-163-251-11	CERAMIC CHIP	100pF 5% 50V
C705	1-104-664-11	ELECT	47μF 20% 25V	C1514	1-107-914-11	ELECT	1000μF 20% 25V
C706	1-164-004-11	CERAMIC CHIP	0.1μF 10% 25V	C1515	1-163-037-11	CERAMIC CHIP	0.022μF 10% 50V

The components identified by shading
and mark $\triangle$ are critical for safety.
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GDM-400PS/400PST/400PST9



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
C1516	1-164-004-11	CERAMIC CHIP 0.1μF	10% 25V	D518	8-719-404-50	DIODE MA111-TX	
C1517	1-107-894-11	ELECT 220μF	20% 35V	D519	8-719-911-19	DIODE 1SS119-25	
C1518	1-107-914-11	ELECT 1000μF	20% 25V	D520	8-719-948-45	DIODE ERA22-08	
C1519	1-106-228-00	MYLAR 0.22μF	10% 100V	D522	8-719-911-19	DIODE 1SS119-25	
C1522	1-163-021-91	CERAMIC CHIP 0.01μF	10% 50V	D523	8-719-911-19	DIODE 1SS119-25	
<CONNECTOR>				D524	8-719-028-72	DIODE RGP02-17EL-6433	
CN501*1-508-879-11	BASE POST			D525	8-719-109-93	ZENER DIODE RD6.2ESB2	
CN502*1-564-515-11	PLUG, CONNECTOR 12P			D601△	8-719-510-53	DIODE D4SB60L	
CN503 1-564-595-11	PLUG, CONNECTOR 14P			D602	8-719-911-19	DIODE 1SS119-25	
CN504*1-564-510-11	PLUG, CONNECTOR 7P			D603	8-719-110-57	ZENER DIODE RD22ESB2	
CN505 1-764-101-11	PIN, CONNECTOR (PC BOARD) 2P			D604	8-719-510-02	DIODE D1NS4	
CN506*1-779-465-11	PIN, CONNECTOR (WITH PWB) 6P			D605	8-719-110-31	ZENER DIODE RD12ESB2	
CN507*1-564-509-11	PLUG, CONNECTOR 6P			D606	8-719-979-64	DIODE UF4005PKG23	
CN510*1-564-511-11	PLUG, CONNECTOR 8P			D607	8-719-110-21	ZENER DIODE RD11ESB1	
CN601 1-691-960-11	PIN, CONNECTOR (PC BOARD) 3P			D608	8-719-911-19	DIODE 1SS119-25	
CN602*1-784-222-11	PIN, CONNECTOR (WITH PWB)			D609	8-719-063-73	DIODE DINL20U-TR	
CN701*1-564-511-11	PLUG, CONNECTOR 8P			D610	8-719-979-64	DIODE UF4005PKG23	
<DIODE>				D611	8-719-059-23	DIODE P6KE200AG23	
D001	8-719-109-85	ZENER DIODE RD5.1ESB2		D612	8-719-027-43	DIODE S2L20UF	
D002	8-719-109-85	ZENER DIODE RD5.1ESB2		D613	8-719-022-97	DIODE D2S4MF	
D004	8-719-109-85	ZENER DIODE RD5.1ESB2		D614	8-719-052-90	DIODE D1NL40-TA2	
D005	8-719-109-85	ZENER DIODE RD5.1ESB2		D615	8-719-052-86	DIODE D2L40-TA	
D010	8-719-109-85	ZENER DIODE RD5.1ESB2		D616	8-719-031-78	DIODE S2L40F	
D014	8-719-404-50	DIODE MA111-TX		D617	8-719-052-91	DIODE D4SBS4-F	
D017	8-719-404-50	DIODE MA111-TX		D619	8-719-022-97	DIODE D2S4MF	
D020	8-719-062-51	DIODE 1PS226-115		D620	8-719-110-63	ZENER DIODE RD24ESB3	
D021	8-719-062-51	DIODE 1PS226-115		D621	8-719-911-19	DIODE 1SS119-25	
D022	8-719-062-51	DIODE 1PS226-115		D622	8-719-029-04	DIODE D5L60	
D023	8-719-062-51	DIODE 1PS226-115		D623	8-719-911-19	DIODE 1SS119-25	
D024	8-719-109-96	ZENER DIODE RD6.8ESB1		D624	8-719-110-46	ZENER DIODE RD16ESB3	
D025	8-719-404-50	DIODE MA111-TX		D625	8-719-911-19	DIODE 1SS119-25	
D026	8-719-404-50	DIODE MA111-TX		D627	8-719-304-63	DIODE RM11C	
D028	8-719-109-85	ZENER DIODE RD5.1ESB2		D701	8-719-976-96	ZENER DIODE DTZ4.7C	
D030	8-719-801-78	DIODE 1SS184		D702	8-719-800-76	DIODE 1SS226	
D031	8-719-109-85	ZENER DIODE RD5.1ESB2		D703	8-719-800-76	DIODE 1SS226	
D032	8-719-976-99	ZENER DIODE DTZ5.1B		D704	8-719-800-76	DIODE 1SS226	
D033	8-719-976-99	ZENER DIODE DTZ5.1B		D705	8-719-800-76	DIODE 1SS226	
D034	8-719-976-99	ZENER DIODE DTZ5.1B		D901	8-719-404-50	DIODE MA111-TX	
D503	8-719-911-19	DIODE 1SS119-25		D902	8-719-158-49	ZENER DIODE RD12SB2	
D504	8-719-404-50	DIODE MA111-TX		D903	8-719-404-50	DIODE MA111-TX	
D505	8-719-109-98	ZENER DIODE RD6.8ESB3		D904	8-719-158-49	ZENER DIODE RD12SB2	
D506	8-719-110-36	ZENER DIODE RD13ESB2		D905	8-719-404-50	DIODE MA111-TX	
D507	8-719-404-50	DIODE MA111-TX		D906	8-719-404-50	DIODE MA111-TX	
D508	8-719-052-86	DIODE D2L40-TA		D907	8-719-404-50	DIODE MA111-TX	
D509	8-719-404-50	DIODE MA111-TX		D908	8-719-404-50	DIODE MA111-TX	
D510	8-719-975-77	DIODE SB340		D910	8-719-110-36	ZENER DIODE RD13ESB2	
D511	8-719-061-21	DIODE FMQ-G5FMS		D912	8-719-110-46	ZENER DIODE RD16ESB3	
D512	8-719-109-85	ZENER DIODE RD5.1ESB2		D913	8-719-979-58	DIODE EGP10D	
D513	8-719-109-85	ZENER DIODE RD5.1ESB2		D914	8-719-110-46	ZENER DIODE RD16ESB3	
D514	8-719-911-19	DIODE 1SS119-25		D915	8-719-911-19	DIODE 1SS119-25	
D515	8-719-911-19	DIODE 1SS119-25		D916	8-719-977-81	DIODE DTZ33B	
D516	8-719-028-72	DIODE RGP02-17EL-6433		D917	8-719-052-86	DIODE D2L40-TA	
D517	8-719-951-30	DIODE ERA91-02		D918	8-719-158-49	ZENER DIODE RD12SB2	
				D919	8-719-109-85	ZENER DIODE RD5.1ESB2	
				D1501	8-719-109-85	ZENER DIODE RD5.1ESB2	
				D1502	8-719-109-85	ZENER DIODE RD5.1ESB2	

GDM-400PS/400PST/400PST9



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The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
D1506	8-719-908-03	DIODE GP08D		L605	1-412-529-11	INDUCTOR 22 μ H	
				L606	1-412-529-11	INDUCTOR 22 μ H	
				L607	1-406-975-21	INDUCTOR 47 μ H	
		<FUSE>					
F601	Δ 1-576-233-11	FUSE (H.B.C.) (6.3A/250V)		L901	1-412-537-31	INDUCTOR 100 μ H	
				L902	1-406-660-41	COIL, CHOKE 15 μ H	
		<FERRITE BEAD>				<PHOTO COUPLER>	
FB001	1-414-598-11	INDUCTOR CHIP		PH601	8-749-010-64	PHOTO COUPLER PC123F2	
FB002	1-414-598-11	INDUCTOR CHIP		PH602	8-749-010-64	PHOTO COUPLER PC123F2	
FB501	1-410-397-21	FERRITE 1.1 μ H				<IC LINK>	
FB601	1-410-396-41	FERRITE 0.45 μ H					
FB602	1-410-397-21	FERRITE 1.1 μ H					
FB901	1-410-397-21	FERRITE 1.1 μ H		PS501	Δ 1-533-592-31	LINK, IC (1.5A/90V AC, 60V DC)	
				PS601	Δ 1-533-593-31	LINK, IC (2A/90V AC, 60V DC)	
				PS901	Δ 1-533-592-31	LINK, IC (1.5A/90V AC, 60V DC)	
		<IC>				<TRANSISTOR>	
IC001	8-759-531-24	IC MB90553pF-G-120-BND					
IC002	8-759-442-20	IC 24LC21AT/SN		Q002	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC004	8-759-454-79	IC 24LC16BT/SN		Q006	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
IC005	8-759-162-80	IC MM1170BFB		Q008	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC007	8-752-078-46	IC CXA2043Q		Q009	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
				Q503	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
IC008	8-759-701-59	IC NJM78M09FA					
IC009	8-759-925-74	IC SN74HC04ANS		Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC010	8-752-083-83	IC CXA2044M-T6		Q505	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
IC011	8-759-168-20	IC TA78L09S		Q507	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC013	8-759-544-88	IC MC74HCT14AFEL		Q509	8-729-901-97	TRANSISTOR 2SA1036K-Q	
				Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC501	8-759-100-96	IC μ PC4558G2					
IC502	8-759-803-42	IC LA6500-FA		Q511	8-729-031-89	TRANSISTOR 2SC3941A-Q(TA)	
IC601	8-749-011-42	IC SI-3050F		Q512	8-729-807-12	TRANSISTOR 2SD1802-S	
IC602	8-759-470-64	IC TOP223Y-BB		Q514	8-729-035-54	TRANSISTOR 2SJ449	
IC603	8-749-013-78	IC MCR5102		Q516	8-729-800-32	TRANSISTOR 2SC2362K-G	
				Q517	8-729-140-50	TRANSISTOR 2SC3209LK	
IC604	8-749-012-49	IC DM-57N					
IC605	8-759-450-47	IC BA05T		Q518	8-729-043-73	TRANSISTOR IRLI540GSLF33	
IC606	8-759-482-62	IC MC33262P		Q519	8-729-033-99	TRANSISTOR 2SC5301-CC	
IC701	8-759-822-38	IC LA6510		Q520	8-729-043-73	TRANSISTOR IRLI540GSLF33	
IC702	8-759-822-38	IC LA6510		Q522	8-729-043-72	TRANSISTOR IRLI530GSLF33	
				Q523	8-729-043-72	TRANSISTOR IRLI530GSLF33	
IC901	8-759-467-70	IC BA9756FS-E2					
IC1501	8-759-803-42	IC LA6500-FA		Q524	8-729-043-72	TRANSISTOR IRLI530GSLF33	
IC1502	8-759-822-38	IC LA6510		Q525	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR	
IC1504	8-759-444-82	IC LA7841L		Q526	8-729-901-00	TRANSISTOR DTC124EK	
				Q527	8-729-033-25	TRANSISTOR DTC114GKA	
		<COIL>		Q528	8-729-204-91	TRANSISTOR 2SA1049-GR	
L001	1-412-537-31	INDUCTOR 100 μ H		Q529	8-729-178-43	TRANSISTOR 2SC2784-E	
L002	1-412-549-11	INDUCTOR 1mH		Q530	8-729-207-89	TRANSISTOR 2SA1358-Y	
L003	1-410-521-11	INDUCTOR 100 μ H		Q531	8-729-207-82	TRANSISTOR 2SC3421-Y	
L501	1-412-537-31	INDUCTOR 100 μ H		Q532	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
L502	1-406-675-11	COIL, CHOKE 4.7mH		Q533	8-729-901-00	TRANSISTOR DTC124EK	
L503	1-406-675-11	COIL, CHOKE 4.7mH		Q534	8-729-901-00	TRANSISTOR DTC124EK	
L504	1-416-532-11	COIL, HORIZONTAL LINEARITY		Q601	8-729-033-25	TRANSISTOR DTC114GKA	
L505	1-406-675-11	COIL, CHOKE 4.7mH		Q602	8-729-029-47	TRANSISTOR DTA143ESA-TP	
L506	1-416-531-11	COIL, HORIZONTAL LINEARITY		Q603	8-729-033-25	TRANSISTOR DTC114GKA	
L602	1-412-537-31	INDUCTOR 100 μ H		Q604	8-729-033-26	TRANSISTOR DTA114GKAT146	
L603	1-412-529-11	INDUCTOR 22 μ H		Q605	8-729-041-65	TRANSISTOR 2SK2195F04	
L604	1-412-529-11	INDUCTOR 22 μ H		Q606	8-729-029-47	TRANSISTOR DTA143ESA-TP	



REF.NO.	PART NO.	DESCRIPTION	REMARK				REF.NO.	PART NO.	DESCRIPTION	REMARK			
Q607	8-729-119-78	TRANSISTOR 2SC2785-HFE					R061	1-216-073-00	RES, CHIP 10K	5%	1/10W		
Q608	8-729-033-26	TRANSISTOR DTA114GKAT146					R062	1-216-025-91	RES, CHIP 100	5%	1/10W		
Q609	8-729-033-25	TRANSISTOR DTC114GKA					R063	1-216-025-91	RES, CHIP 100	5%	1/10W		
Q610	8-729-029-66	TRANSISTOR DTC114ESA					R064	1-216-017-91	RES, CHIP 47	5%	1/10W		
Q612	8-729-120-28	TRANSISTOR 2SC1623-L5L6					R065	1-216-111-00	RES, CHIP 390K	5%	1/10W		
Q901	8-729-120-28	TRANSISTOR 2SC1623-L5L6					R066	1-216-073-00	RES, CHIP 10K	5%	1/10W		
Q902	8-729-920-72	TRANSISTOR 2SA1037K-T-146-QR					R067	1-216-679-11	METAL CHIP 15K	0.50%	1/10W		
Q903	8-729-901-97	TRANSISTOR 2SA1036K-Q					R068	1-216-073-00	RES, CHIP 10K	5%	1/10W		
Q904	8-729-120-28	TRANSISTOR 2SC1623-L5L6					R069	1-216-049-91	RES, CHIP 1K	5%	1/10W		
Q905	8-729-035-54	TRANSISTOR 2SJ449					R070	1-216-061-00	RES, CHIP 3.3K	5%	1/10W		
Q906	8-729-041-58	TRANSISTOR 2SK2675					R071	1-216-065-91	RES, CHIP 4.7K	5%	1/10W		
							R072	1-216-065-91	RES, CHIP 4.7K	5%	1/10W		
							R073	1-216-073-00	RES, CHIP 10K	5%	1/10W		
		<RESISTOR>					R074	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R001	1-216-057-00	RES, CHIP 2.2K	5%	1/10W			R075	1-216-681-11	METAL CHIP 18K	0.50%	1/10W		
R003	1-216-057-00	RES, CHIP 2.2K	5%	1/10W			R076	1-216-651-11	METAL CHIP 1K	0.50%	1/10W		
R005	1-216-025-91	RES, CHIP 100	5%	1/10W			R077	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R007	1-216-057-00	RES, CHIP 2.2K	5%	1/10W			R078	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R008	1-216-049-91	RES, CHIP 1K	5%	1/10W			R079	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R009	1-216-049-91	RES, CHIP 1K	5%	1/10W			R080	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R011	1-216-049-91	RES, CHIP 1K	5%	1/10W			R081	1-216-661-11	METAL CHIP 2.7K	0.50%	1/10W		
R012	1-216-049-91	RES, CHIP 1K	5%	1/10W			R082	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R013	1-216-057-00	RES, CHIP 2.2K	5%	1/10W			R084	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R015	1-216-017-91	RES, CHIP 47	5%	1/10W			R085	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R017	1-216-097-91	RES, CHIP 100K	5%	1/10W			R086	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R018	1-216-017-91	RES, CHIP 47	5%	1/10W			R087	1-216-679-11	METAL CHIP 15K	0.50%	1/10W		
R019	1-216-125-00	RES, CHIP 1.5M	5%	1/10W			R088	1-216-089-91	RES, CHIP 47K	5%	1/10W		
R020	1-216-073-00	RES, CHIP 10K	5%	1/10W			R089	1-216-025-91	RES, CHIP 100	5%	1/10W		
R023	1-216-025-91	RES, CHIP 100	5%	1/10W			R090	1-216-025-91	RES, CHIP 100	5%	1/10W		
R026	1-216-047-91	RES, CHIP 820	5%	1/10W			R091	1-216-025-91	RES, CHIP 100	5%	1/10W		
R027	1-216-049-91	RES, CHIP 1K	5%	1/10W			R092	1-216-025-91	RES, CHIP 100	5%	1/10W		
R029	1-216-049-91	RES, CHIP 1K	5%	1/10W			R093	1-216-025-91	RES, CHIP 100	5%	1/10W		
R030	1-216-049-91	RES, CHIP 1K	5%	1/10W			R094	1-216-025-91	RES, CHIP 100	5%	1/10W		
R031	1-216-057-00	RES, CHIP 2.2K	5%	1/10W			R095	1-216-025-91	RES, CHIP 100	5%	1/10W		
R032	1-216-049-91	RES, CHIP 1K	5%	1/10W			R096	1-216-025-91	RES, CHIP 100	5%	1/10W		
R034	1-216-049-91	RES, CHIP 1K	5%	1/10W			R097	1-216-039-00	RES, CHIP 390	5%	1/10W		
R035	1-216-671-11	METAL CHIP 6.8K	0.50%	1/10W			R098	1-216-671-11	METAL CHIP 6.8K	0.50%	1/10W		
R036	1-216-073-00	RES, CHIP 10K	5%	1/10W			R501	1-216-097-91	RES, CHIP 100K	5%	1/10W		
R037	1-216-049-91	RES, CHIP 1K	5%	1/10W			R502	1-216-049-91	RES, CHIP 1K	5%	1/10W		
R038	1-216-295-91	SHORT 0					R503	1-216-097-91	RES, CHIP 100K	5%	1/10W		
R040	1-216-049-91	RES, CHIP 1K	5%	1/10W			R504	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R041	1-216-049-91	RES, CHIP 1K	5%	1/10W			R505	1-216-081-00	RES, CHIP 22K	5%	1/10W		
R044	1-216-049-91	RES, CHIP 1K	5%	1/10W			R506	1-216-033-00	RES, CHIP 220	5%	1/10W		
R046	1-216-295-91	SHORT 0					R507	1-216-093-00	RES, CHIP 68K	5%	1/10W		
R048	1-216-073-00	RES, CHIP 10K	5%	1/10W			R508	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R049	1-216-073-00	RES, CHIP 10K	5%	1/10W			R509	1-249-421-11	CARBON 2.2K	5%	1/4W		
R050	1-216-025-91	RES, CHIP 100	5%	1/10W			R510	1-216-033-00	RES, CHIP 220	5%	1/10W		
R051	1-216-065-91	RES, CHIP 4.7K	5%	1/10W			R511	1-216-025-91	RES, CHIP 100	5%	1/10W		
R052	1-216-025-91	RES, CHIP 100	5%	1/10W			R512	1-219-755-11	CARBON 10M	5%	1/2W		
R053	1-216-097-91	RES, CHIP 100K	5%	1/10W			R513	1-216-097-91	RES, CHIP 100K	5%	1/10W		
R055	1-216-089-91	RES, CHIP 47K	5%	1/10W			R514	1-216-057-00	RES, CHIP 2.2K	5%	1/10W		
R056	1-216-017-91	RES, CHIP 47	5%	1/10W			R515	1-216-683-11	METAL CHIP 22K	0.50%	1/10W		
R057	1-216-025-91	RES, CHIP 100	5%	1/10W			R516	1-216-683-11	METAL CHIP 22K	0.50%	1/10W		
R058	1-216-049-91	RES, CHIP 1K	5%	1/10W			R517	1-216-009-91	RES, CHIP 22	5%	1/10W		
R059	1-216-295-91	SHORT 0					R518	1-216-073-00	RES, CHIP 10K	5%	1/10W		
R060	1-216-025-91	RES, CHIP 100	5%	1/10W			R519	1-216-065-91	RES, CHIP 4.7K	5%	1/10W		

GDM-400PS/400PST/400PST9



Les composants identifiés par un tramé et une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

REF.NO.	PART NO.	DESCRIPTION	REMARK			REF.NO.	PART NO.	DESCRIPTION	REMARK		
R520	1-216-097-91	RES, CHIP	100K	5%	1/10W	R583	1-249-389-11	CARBON	4.7	5%	1/4W F
R521	1-219-510-11	CARBON	470K	5%	1/2W						
R522	1-216-065-91	RES, CHIP	4.7K	5%	1/10W	R584	1-249-389-11	CARBON	4.7	5%	1/4W F
R523	1-216-097-91	RES, CHIP	100K	5%	1/10W	R587	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R524	1-216-619-11	METAL CHIP	47	0.50%	1/10W	R589	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R525	1-216-675-11	METAL CHIP	10K	0.50%	1/10W	R590	1-247-815-91	CARBON	220	5%	1/4W
R526	1-260-296-11	CARBON	2.2	5%	1/2W	R591	1-249-393-11	CARBON	10	5%	1/4W F
R527	1-215-860-11	METAL OXIDE	33	5%	1W F	R592	1-216-341-11	METAL OXIDE	0.22	5%	1W F
R528	1-216-677-11	METAL CHIP	12K	0.50%	1/10W	R593	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R529	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R594	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R530	1-216-073-00	RES, CHIP	10K	5%	1/10W	R595	1-216-065-91	RES, CHIP	4.7K	5%	1/10W
R531	1-216-081-00	RES, CHIP	22K	5%	1/10W	R596	1-216-057-00	RES, CHIP	2.2K	5%	1/10W
R532	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R597	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R533	1-216-073-00	RES, CHIP	10K	5%	1/10W	R598	1-216-101-00	RES, CHIP	150K	5%	1/10W
R534	1-216-683-11	METAL CHIP	22K	0.50%	1/10W	R601△	1-202-880-91	SOLID	330K	20%	1/2W
R535	1-216-049-91	RES, CHIP	1K	5%	1/10W	R602	1-260-089-11	CARBON	150	5%	1/2W
R536	1-216-425-11	METAL OXIDE	56	5%	1W F	R603	1-249-403-11	CARBON	68	5%	1/4W
R537	1-216-073-00	RES, CHIP	10K	5%	1/10W	R604	1-215-428-00	METAL	2K	1%	1/4W
R538	1-216-073-00	RES, CHIP	10K	5%	1/10W	R605	1-202-933-61	FUSIBLE	0.1	10%	1/2W F
R539	1-219-677-11	METAL	1.8	5%	10W	R607	1-216-073-00	RES, CHIP	10K	5%	1/10W
R540	1-216-679-11	METAL CHIP	15K	0.50%	1/10W	R608	1-216-342-11	METAL OXIDE	0.27	5%	1W F
R541	1-216-673-11	METAL CHIP	8.2K	0.50%	1/10W	R610	1-215-445-00	METAL	10K	1%	1/4W
R542	1-216-049-91	RES, CHIP	1K	5%	1/10W	R611	1-249-389-11	CARBON	4.7	5%	1/4W F
R543	1-249-429-11	CARBON	10K	5%	1/4W	R613	1-247-791-91	CARBON	22	5%	1/4W
R544	1-216-423-11	METAL OXIDE	27	5%	1W F	R614	1-215-861-00	METAL OXIDE	47	5%	1W F
R546	1-216-049-91	RES, CHIP	1K	5%	1/10W	R615	1-249-413-11	CARBON	470	5%	1/4W
R548	1-216-674-11	METAL CHIP	9.1K	0.50%	1/10W	R616	1-249-441-11	CARBON	100K	5%	1/4W
R549	1-216-039-00	RES, CHIP	390	5%	1/10W	R617	1-249-417-11	CARBON	1K	5%	1/4W
R551	1-216-049-91	RES, CHIP	1K	5%	1/10W	R619	1-215-419-00	METAL	820	1%	1/4W
R553	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W	R620	1-215-403-00	METAL	180	1%	1/4W
R554	1-249-429-11	CARBON	10K	5%	1/4W F	R621	1-215-459-00	METAL	39K	1%	1/4W
R555	1-216-049-91	RES, CHIP	1K	5%	1/10W	R622	1-215-481-00	METAL	330K	1%	1/4W
R557	1-216-385-11	METAL OXIDE	0.47	5%	3W F	R623	1-247-815-91	CARBON	220	5%	1/4W
R558	1-216-097-91	RES, CHIP	100K	5%	1/10W	R624	1-249-417-11	CARBON	1K	5%	1/4W
R559	1-216-049-91	RES, CHIP	1K	5%	1/10W	R625	1-249-413-11	CARBON	470	5%	1/4W F
R560	1-260-096-11	CARBON	560	5%	1/2W	R628	1-249-417-11	CARBON	1K	5%	1/4W
R561	1-249-413-11	CARBON	470	5%	1/4W F	R629	1-215-443-00	METAL	8.2K	1%	1/4W
R562	1-260-316-51	CARBON	100	5%	1/2W	R630	1-215-484-00	METAL	430K	1%	1/4W
R563	1-215-886-11	METAL OXIDE	100	5%	2W F	R631	1-215-484-00	METAL	430K	1%	1/4W
R564	1-216-049-91	RES, CHIP	1K	5%	1/10W	R633	1-249-389-11	CARBON	4.7	5%	1/4W F
R565	1-216-079-00	RES, CHIP	18K	5%	1/10W	R634	1-249-429-11	CARBON	10K	5%	1/4W
R566	1-260-314-11	CARBON	68	5%	1/2W	R635	1-215-880-00	METAL OXIDE	10	5%	2W F
R567	1-249-403-11	CARBON	68	5%	1/4W	R636	1-215-484-00	METAL	430K	1%	1/4W
R568	1-214-840-00	METAL	100	1%	1/2W	R638	1-247-807-31	CARBON	100	5%	1/4W
R569	1-216-073-00	RES, CHIP	10K	5%	1/10W	R639	1-247-863-91	CARBON	22K	5%	1/4W
R570	1-249-429-11	CARBON	10K	5%	1/4W F	R640	1-247-863-91	CARBON	22K	5%	1/4W
R571	1-216-081-00	RES, CHIP	22K	5%	1/10W	R641	1-215-482-00	METAL	360K	1%	1/4W
R572	1-249-437-11	CARBON	47K	5%	1/4W	R642	1-215-485-00	METAL	470K	1%	1/4W
R573	1-249-437-11	CARBON	47K	5%	1/4W	R643	1-215-485-00	METAL	470K	1%	1/4W
R574	1-249-437-11	CARBON	47K	5%	1/4W	R644	1-215-485-00	METAL	470K	1%	1/4W
R575	1-249-437-11	CARBON	47K	5%	1/4W	R645	1-215-481-00	METAL	330K	1%	1/4W
R576	1-249-437-11	CARBON	47K	5%	1/4W	R646	1-215-462-00	METAL	51K	1%	1/4W
R577	1-249-389-11	CARBON	4.7	5%	1/4W F	R647	1-215-451-00	METAL	18K	1%	1/4W
R578	1-216-051-00	RES, CHIP	1.2K	5%	1/10W	R648	1-215-443-00	METAL	8.2K	1%	1/4W
R580	1-249-430-11	CARBON	12K	5%	1/4W	R649	1-215-861-00	METAL OXIDE	47	5%	1W F
R582	1-249-413-11	CARBON	470	5%	1/4W F	R651	1-249-429-11	CARBON	10K	5%	1/4W
						R652	1-249-429-11	CARBON	10K	5%	1/4W



REF.NO.	PART NO.	DESCRIPTION	REMARK	REF.NO.	PART NO.	DESCRIPTION	REMARK
R653	1-215-485-00	METAL 470K	1% 1/4W	R913	1-216-025-91	RES, CHIP 100	5% 1/10W
R656	1-215-485-00	METAL 470K	1% 1/4W	R914	1-216-073-00	RES, CHIP 10K	5% 1/10W
R657	1-215-473-00	METAL 150K	1% 1/4W	R915	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R658	1-215-421-00	METAL 1K	1% 1/4W	R916	1-216-033-00	RES, CHIP 220	5% 1/10W
R659	1-249-429-11	CARBON 10K	5% 1/4W				
R660	1-249-421-11	CARBON 2.2K	5% 1/4W	R917	1-249-397-11	CARBON 22	5% 1/4W F
R663	1-249-441-11	CARBON 100K	5% 1/4W	R918	1-216-033-00	RES, CHIP 220	5% 1/10W
R664	1-216-364-11	METAL OXIDE 0.39	5% 2W F	R919	1-219-727-11	METAL 68	5% 10W
R665	1-216-364-11	METAL OXIDE 0.39	5% 2W F	R920	1-249-389-11	CARBON 4.7	5% 1/4W F
R669	1-249-401-11	CARBON 47	5% 1/4W	R921	1-219-748-11	CARBON 4.7K	5% 1/2W
R674	1-247-895-91	CARBON 470K	5% 1/4W	R922	1-216-675-11	METAL CHIP 10K	0.50%1/10W
R701	1-249-383-11	CARBON 1.5	5% 1/4W F	R923	1-216-653-11	METAL CHIP 1.2K	0.50%1/10W
R702	1-216-295-91	SHORT 0		R924	1-220-825-11	CARBON 330K	5% 1/2W
R703	1-216-057-00	RES, CHIP 2.2K	5% 1/10W	R925	1-216-073-00	RES, CHIP 10K	5% 1/10W
R704	1-216-690-11	METAL CHIP 43K	0.50%1/10W	R926	1-219-748-11	CARBON 4.7K	5% 1/2W
R705	1-216-679-11	METAL CHIP 15K	0.50%1/10W	R927	1-216-049-91	RES, CHIP 1K	5% 1/10W
R706	1-216-073-00	RES, CHIP 10K	5% 1/10W	R928	1-216-653-11	METAL CHIP 1.2K	0.50%1/10W
R707	1-216-073-00	RES, CHIP 10K	5% 1/10W	R930	1-216-089-91	RES, CHIP 47K	5% 1/10W
R708	1-216-073-00	RES, CHIP 10K	5% 1/10W	R932	1-216-085-00	RES, CHIP 33K	5% 1/10W
R709	1-216-073-00	RES, CHIP 10K	5% 1/10W	R933	1-216-091-00	RES, CHIP 56K	5% 1/10W
R710	1-249-383-11	CARBON 1.5	5% 1/4W F	R934	1-216-668-11	METAL CHIP 5.1K	0.50%1/10W
R711	1-249-383-11	CARBON 1.5	5% 1/4W F	R935	1-216-089-91	RES, CHIP 47K	5% 1/10W
R712	1-249-383-11	CARBON 1.5	5% 1/4W F	R936	1-216-071-00	RES, CHIP 8.2K	5% 1/10W
R713	1-249-383-11	CARBON 1.5	5% 1/4W F	R937	1-216-025-91	RES, CHIP 100	5% 1/10W
R714	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R939	1-216-033-00	RES, CHIP 220	5% 1/10W
R715	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R940	1-216-073-00	RES, CHIP 10K	5% 1/10W
R716	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R941	1-216-025-91	RES, CHIP 100	5% 1/10W
R717	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R942	1-219-748-11	CARBON 4.7K	5% 1/2W
R718	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R943	1-216-073-00	RES, CHIP 10K	5% 1/10W
R719	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R1003	1-216-093-91	RES, CHIP 68K	5% 1/10W
R720	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R1004	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R721	1-216-308-00	RES, CHIP 4.7	5% 1/10W	R1005	1-216-667-11	METAL CHIP 4.7K	0.50%1/10W
R724	1-249-383-11	CARBON 1.5	5% 1/4W F	R1008	1-216-049-91	RES, CHIP 1K	5% 1/10W
R725	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1009	1-216-049-91	RES, CHIP 1K	5% 1/10W
R726	1-249-383-11	CARBON 1.5	5% 1/4W F	R1021	1-216-097-91	RES, CHIP 100K	5% 1/10W
R727	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1022	1-216-089-91	RES, CHIP 47K	5% 1/10W
R728	1-249-383-11	CARBON 1.5	5% 1/4W F	R1024	1-216-025-91	RES, CHIP 100	5% 1/10W
R729	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1025	1-216-025-91	RES, CHIP 100	5% 1/10W
R730	1-249-383-11	CARBON 1.5	5% 1/4W F	R1028	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R731	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1029	1-216-049-91	RES, CHIP 1K	5% 1/10W
R735	1-215-882-00	METAL OXIDE 22	5% 2W F	R1030	1-216-073-00	RES, CHIP 10K	5% 1/10W
R737	1-215-882-00	METAL OXIDE 22	5% 2W F	R1031	1-216-057-00	RES, CHIP 2.2K	5% 1/10W
R739	1-215-882-00	METAL OXIDE 22	5% 2W F	R1032	1-216-057-00	RES, CHIP 2.2K	5% 1/10W
R741	1-215-882-00	METAL OXIDE 22	5% 2W F	R1035	1-216-073-00	RES, CHIP 10K	5% 1/10W
R901	1-216-065-91	RES, CHIP 4.7K	5% 1/10W	R1037	1-249-389-11	CARBON 4.7	5% 1/4W F
R902	1-216-097-91	RES, CHIP 100K	5% 1/10W	R1038	1-216-065-91	RES, CHIP 4.7K	5% 1/10W
R903	1-218-762-11	METAL CHIP 270K	0.50%1/10W	R1039	1-216-041-00	RES, CHIP 470	5% 1/10W
R904	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1501	1-216-077-00	RES, CHIP 15K	5% 1/10W
R905	1-216-061-00	RES, CHIP 3.3K	5% 1/10W	R1502	1-216-075-00	RES, CHIP 12K	5% 1/10W
R906	1-216-109-00	RES, CHIP 330K	5% 1/10W	R1503	1-216-075-00	RES, CHIP 12K	5% 1/10W
R907	1-216-065-91	RES, CHIP 4.7K	5% 1/10W	R1504	1-216-689-11	RES, CHIP 39K	5% 1/10W
R908	1-216-009-91	RES, CHIP 22	5% 1/10W	R1505	1-249-383-11	CARBON 1.5	5% 1/4W F
R909	1-216-073-00	RES, CHIP 10K	5% 1/10W	R1506	1-216-473-11	METAL OXIDE 56	5% 3W F
R910	1-216-397-11	METAL OXIDE 4.7	5% 3W F	R1507	1-249-383-11	CARBON 1.5	5% 1/4W F
R911	1-216-081-00	RES, CHIP 22K	5% 1/10W	R1508	1-216-057-00	RES, CHIP 2.2K	5% 1/10W
R912	1-216-057-00	RES, CHIP 2.2K	5% 1/10W	R1509	1-216-298-00	RES, CHIP 2.2	5% 1/10W
				R1510	1-249-383-11	CARBON 1.5	5% 1/4W F



REF.NO.	PART NO.	DESCRIPTION			REMARK
R802	1-249-411-11	CARBON	330	5%	1/4W
R803	1-249-413-11	CARBON	470	5%	1/4W
R804	1-249-413-11	CARBON	470	5%	1/4W
R805	1-249-415-11	CARBON	680	5%	1/4W
R806	1-249-417-11	CARBON	1K	5%	1/4W
R807	1-249-417-11	CARBON	1K	5%	1/4W
R808	1-249-426-11	CARBON	5.6K	5%	1/4W
R809	1-249-417-11	CARBON	1K	5%	1/4W
R810	1-249-417-11	CARBON	1K	5%	1/4W
R811	1-247-815-91	CARBON	220	5%	1/4W
R812	1-249-411-11	CARBON	330	5%	1/4W
R813	1-249-411-11	CARBON	330	5%	1/4W
R814	1-249-411-11	CARBON	330	5%	1/4W
R815	1-215-445-00	METAL	10K	1%	1/4W
R816	1-215-469-00	METAL	100K	1%	1/4W

<SWITCH>

S800	1-571-532-21	SWITCH, TACTILE (CONT+)
S801	1-571-532-21	SWITCH, TACTILE (CONT-)
S802	1-571-532-21	SWITCH, TACTILE (OSD)
S803	1-571-532-21	SWITCH, TACTILE (BRT+)
S804	1-571-532-21	SWITCH, TACTILE (BRT-)
S805	1-571-532-21	SWITCH, TACTILE (INPUT)
S806	1-571-532-21	SWITCH, TACTILE (ASC)
S807	1-571-532-21	SWITCH, TACTILE (RESET)

<THERMISTOR>

TH801	1-807-796-11	THERMISTOR
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